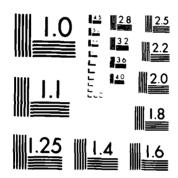
AD-A149 400 STRATEGIC MÁNAGEMENT FOR ORGANIZATIONAL EFFECTIVENESS THE EFFECT OF HUMAN. (U) BRIGHAM YOUNG UNIV PROVO UT DEPT OF CIVIL ENGINEERING L S OPPENHEIM ET AL. DEC 84 ONR-FR-1-VOL-3 N00014-82-C-0803 F/G 5/1 NL



MICROCOPY RESOLUT IN TEST CHART
NATIONAL BONGA IN TANCAR, IN A



AD-A149 400

STRATEGIC MANAGEMENT FOR ORGANIZATIONAL EFFECTIVENESS:

THE EFFECT OF HUMAN RESOURCE PLANNING ON RETENTION AND RELATED ISSUES

VOLUME THREE

THE COPY

Applied Research Center

The Wharton School

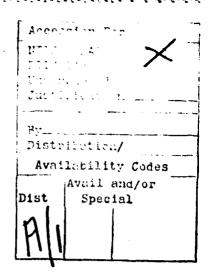
University of Pennsylvania Philadelphia, Pennsylvania 19104

SELECTE JAN9 1985

D

84 12 27 063

Represent for public colorest Discontinua United



STRATEGIC MANAGEMENT FOR ORGANIZATIONAL EFFECTIVENESS:

THE EFFECT OF HUMAN RESOURCE PLANNING ON RETENTION AND RELATED ISSUES

VOLUME THREE

Lynn S. Oppenheim, Ph.D.
Susan D. Hyman, Ph.D.
Christine T. Kydd, Ph.D.

The Wharton Applied Research Center
3508 Market Street
Suite 100
University of Pennsylvania
Philadelphia, PA 19104



December 1984

Approved for public releases

Distribution Unlimited

LEAD INSTRUCTIONS B. ORE COMPLETING FORM
PIENT'S CATALOG NUMBER
e of REPORT & PERIOD COVERED al Technical Report
FORMING ORG. REPORT NUMBER
TRACT OR GRANT NUMBER(*)
OGRAM ELEMENT, PROJECT, TASK EA & WORK UNIT NUMBERS NR-170-949
ember 1984
IDER OF PAGES 52
Classified CLASSIFICATION DOWNGRADING

Approved for public release: distribution unlimited

17. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, If different from Report)

SUPPLEMENTARY NOTES

KEY WORDS (Continue on reverse side if necessary and identify by block number)

Strategic management; organizational effectiveness; human resources; retention; mobility; rewards; organizational communication; perceptions of organization

ABSTRACT (Continue on reverse side if necessary and identify by block number)

The research reported here assessed the match between strategic direction, human resource policies and the perceptions of those policies held by middle managers in five successful organizations. Human resource practices related to retention -- job movement, organizational signals, and incentives -- were the focus of three separate studies. Results from the studies were combined with information from formal documents and interviews to form the basis for comparative case studies. Approximately 100 managers at each of six site

20. contributed to the results reported here.

The key research findings were: 1) a model of job movement which took expectations into account was a good predictor of the way in which a manager and his boss divided tasks; 2) the rate of movement from one job to the next was more rapid in organizations where jobs were clearly and narrowly defined than when jobs evolved and expanded over time; 3) signals from the organization which were public, positive and relevant to a manager's goals increased the likelihood of his remaining with the organization; 4) managers were more likely to see themselves as resource constrained if goal setting and resource allocation were decided at different levels in the organization; 5) informal incentives were more salient to middle managers than most formal incentives.

The results indicated that the strategic considerations of these organizations were well served by their human resource practices although the configuration of policies and practices differed. The research also indicated that these effective organizations exhibited greater flexibility in interpreting policy and enforcing boundaries in areas in which they needed information to innovate and adapt.

TABLE OF CONTENTS

Į	PAGE
VOLUME III:	
CHAPTER ONE: REVIEW OF AGGREGATE FINDINGS	
I. Study One	1
II. Study Two	5
III. Study Three	7
CHAPTER TWO: DISCUSSION	
I. Overview of Model	10
II. Environment	12
III. Strategic Considerations	15
IV. Planning Processes	19
V. Human Resource Policies	20
VI. Perceptions of Middle Managers	26
CHAPTER THREE: IMPLICATIONS	
I. General Implications	38
II. Implications for the Navy	45
III. Future Directions for Research	49
CHAPTER FOUR: SUMMARY	54
REFERENCES	60

REVIEW OF AGGREGATE FINDINGS

The first part of this report presented aggregate findings across organizations for each of the three studies. Major emphasis was placed on issues and findings that were common among the six participating organizations. We then focused on those characteristics of organizations which differentiated each company from the other participants. These organizational differences, along with their implications for strategic and human resource policy, were elaborated for each company case study. We now return briefly to the aggregate findings of the three studies to discuss the results in light of the case studies just reviewed.

Study One examined issues of job mobility; Study Two assessed the effects of organizational signals on stay/leave decisions; and Study Three explored planning, goal setting and incentive systems. Each of the three subsections below reviews the general purpose and main findings of the relevant study and then discusses interorganizational patterns. Since Study Three frames the entire project, its findings are incorporated in many of the patterns described below.

I. STUDY ONE

This study investigated the relationship between job tenure and superiorsubordinate dynamics of middle managers. First, we examined whether
individuals responded more strongly to time already spent on the job or to
time remaining on the job. The answer determines whether mobility planning
should center around the timing of job rotations or the management of time
expectations and anticipated transitions. Second, we explored whether the
subordinate's or the boss's job tenure had the greater effect on treatment of
the subordinate. This answer reflects both the importance of employee

development and how such development is influenced.

I.A. Aggregate Findings

The aggregate results clearly supported the basic contention that job tenure is related to professional behavior. More specifically, they showed that the middle manager's input into decisions and his boss's support regarding career enhancing assignments and opportunities covaried significantly with the middle manager's job cycle. Site departures from these findings point to several important organizational characteristics that moderate job tenure's effects and therefore alter the appropriate human resource response.

I.B. Middle Manager Versus Boss Job Tenure

While in the aggregate the middle manager's job tenure was more important, the predominance of one individual's tenure over another reflects the firm's philosophies and operations concerning the role of the subordinate.

Metro Credit was most in line with the aggregate model. The company environment supports and encourages autonomy and freedom; the work itself involves individually-initiated transactions that require long gestation periods. Leisure Products matched aggregate effects second most closely. At LPC middle managers stressed that success required showing initiative and proving one's independence as quickly as possible. The boss's job tenure was far more significant as a main effect at Sky Technologies and at Middle Bank. Both these firms are highly centralized bureaucracies with crisp hierarchical distinctions. The importance of each dyadic member's tenure was most evenly matched at Metro Bank. At Metro Bank, a highly formalized and centralized locus of power coexists with a high degree of regional autonomy. Hence, the importance of middle manager's job tenure in comparison to the boss's job

tenure appears to change with the relative power of each dyadic member.

I.C. Job Longevity Versus Job Cycle

In line with the aggregate findings, job cycle was the better predictor of behavior for four out of five participant sites. Sky Technology was the only firm in which tenure-to-date was a much stronger predictor.

The comparison of Sky Technologies and Middle Bank -- which represent the two extremes -- suggests that the relative explanatory power of one job tenure approach over another is related to the nature of job definition and job change. At Middle Bank, jobs do not abruptly change but evolve.

Consequently, the notion of stabilization -- that people become acclimated and bored with a job over time -- becomes, at a minimum, less apparent because the usual job demarcations, such as a title change, may not coincide with the actual change in responsibilities and accountabilities. The job cycle model probably retains its relevance because managers use unambiguous signifiers of a job's beginning and endpoint, like changing organizational units or retiring.

At Sky Technologies, on the other hand, long-term assignments are usually dictated in advance by project requirements; hence job evolution is limited. At the same time, the flurry of activities at the end of a project greatly reduces the possibility of gradual disengagement activities, particularly since professional expertise and accomplishment are highly valued. Both past research and this study indicate that work force characteristics (e.g., highly technical) and work definition (e.g., clear projects) may moderate job tenure's effects as an elapsed and as an anticipated measure of time (cf. Katz, 1983).

I.D. The Nature of Job Tenure and Job Change

The discussion above also suggests that job tenure effects and the nature of job change are closely linked. The nature of job change also was related to another mobility issue: movement's rate and salience. The more "straightforward" the job, the quicker the job movement. Two factors contributed to "straightforwardness": the complexity of the tasks to be performed and the stability of those tasks over time.

In Leisure Products, which had the quickest movement -- often less than once every 1.5 years -- job responsibilities were narrow in scope and unambiguously established. Any change in assignment meant a change in duties, job title, and office. On the other hand, at Middle Bank, which had the slowest movement, jobs were continually negotiated and evolved over time. There was no clear jump from one level to another, from one title to another, or from one assignment to another. Moreover, the bank stressed growth in a particular position or area of expertise.

Metro Bank, Metro Credit, and Sky Technologies had a mix of job definition and job change elements. In Sky Technologies products and deadlines were clearly specified but they were also complex and oftentimes required state-of-the-art thinking. In Metro Bank and Metro Credit, levels of responsibility, such as the amount of financial authority or size of the client base, increased gradually. However, in contrast to Middle Bank, the corporate philosophy was to cross-train people in a number of functional areas, so job evolution was not allowed to occur indefinitely.

This analysis suggests that organizations have several ways of combating task complacency. Rapid movement is both possible and necessary when jobs are narrowly defined. Narrow definition makes individuals both easily trained and easily bored. Slower movement is possible and desirable when tasks are

complex, requiring longer job mastery periods. Slower movement is also possible if jobs have high variety either due to multiple tasks and projects or ever-changing tasks. (cf. Schein (1978) and Walker (1980) for discussions of on-the-job training.) The rate of movement also seems to relate to the company's ability to smoothly change its practices. High rate is coupled with individual's use of rate as a measure of professional worth and value. Hence, they are more resistant to slowing down that rate even when the business warrants a slowdown.

II. STUDY TWO

This research examines the relationship between organizational signals and a middle manager's decision to stay in or leave the current organization. Signal effects were determined via a field experiment in which short scenarios or descriptions of feasible events were presented to the manager for comment.

II.A. Aggregate Findings

The findings showed that if the expected probability of attaining an increased position within the presently employing firm was greater than the expected probability of attaining a similar position elsewhere (following receipt of a signal), then one was less likely to search for an alternative position. On the other hand, if the estimated likelihood of achieving a higher position in the market was greater than in the current organization (based on the signal received), one was more inclined to begin search.

Furthermore, the level of publicity amplifies the signal's effect both internally and externally in the direction of sign; this magnitude effect is slightly greater internally than externally. Sign of a signal has a directional effect on perceptions of both internal position and external position in the direction of sign. These effects were strengthened when

personal goals matched signal goal relevance, which points to the fact that signals can be most effective when they are public and congruent with personal goals.

Although the individual and organizational participants in this study varied along many dimensions, results were highly consistent across both managers and companies. There were two major organizational differences which yielded differential perceptions of the signals in the study, and these are discussed below.

II.B. Organizational Mobility Practices and Signal Effects

An organization's practices regarding mobility in and out of firm were directly related to individual's perception that a signal all affect his external marketability and/or his probability of leaving an relization (given a particular signal). These practices were manifested in two ways:

(a) the organization's espoused philosophies regarding "promote from within" versus "hire the best" at any level and (b) the organization's actual ability to offer career paths in a particular field or area of expertise.

In the Navy, which has the strictest promote from within policy, the impact of a signal's external marketability was always rated as neutral. In Metro Bank, which has a strong promotion from within philosophy, a high tolerance for "justifiable" failures, and many internal opportunities, managers were also relatively unconcerned with a signal's external impact.

Individuals at Metro Credit and Leisure Products, on the other hand, were acutely attuned to a signal's possible effect in the external marketplace. They generally perceived positive signals as having a more positive external impact than individuals in the other organizations. Also, private signals resulted in higher likelihoods of leaving for this externally aware group. The attitudes of Leisure Products managers can be directly attributed to that

firm's hiring and firing philosophy: LPC hires the best and is ready to fire people whose performance has slackened or whose skills do not match the specific position. Metro Credit's external orientation, in contrast, was not due to the corporation's promotion philosophy but to labor market realities. There are fewer internal opportunities for Metro Credit people to advance in their area of expertise and the external opportunities are highly visible due to the nature of the business -- viz., constant client contact and comparison with other credit firms.

II.C. Formalization and Signal Effects

The organizational signals investigated represent only some of the ways that individuals learn about their standing within a company. Moreover, the importance of these signals varies with the degree to which one's standing is concretized by other factors. Consequently, in the two most bureaucratic units, the Navy and Sky Tech, organizational signals were perceived to have less impact on one's internal and external marketability and, subsequently, one's intent to search or leave, than in the other four sites.

At both the Navy and Sky Tech there are numerous formal reviews and documentation that attest to an individual's standing and worth. In the Navy, the rules for promotion and dismissal are manifold and clear. Moreover, an officer is never dismissed because a job has been phased out; he is simply reassigned. In Sky Tech, information not only comes from the "system," but the work itself. In this high technology environment, feedback comes mainly through the tasks themselves rather than from supervisors or other people.

III. STUDY THREE

This research explored the planning processes and the incentives and disincentives which could motivate managers to achieve goals. In order to

compare the idealized planning process with the policies and practices of the organizations, this research examined both the formal planning and human resource processes and perceptions of those processes by middle managers. An open-ended interview protocol was adopted so as not to force responses into preconceived categories.

In all organizations except the Navy, systems function more loosely than policy suggested. Despite (or, perhaps, because of) this looseness, middle managers viewed the organizations positively. The organizational differences with respect to planning and rewards were discussed at length in the individual case studies. In the sections that follow, we concentrate on the main aggregate findings.

III.A. Planning Process: Policy and Practice

In general, planning began at the top of the organization, moved downwards through the hierarchy, moved back up, and then down again. The most serious planning was done for the next year. The perceived focus of planning authority, however, differed across organizations. Organizations varied both in the participation of middle managers compared to their bosses and upper management and in their reliance on formal documents (a variant of institutionalization). In general, business information was more available in decentralized organizations, such as Metro Bank, in which a "need to know" was never an issue.

III.B. Planning Issues for Manager Activity

The effect the planning process had on a manager's day-to-day activities differed according to the types and specificity of goals and stability of the environment. In general, the relationship between goals and activities was strong when (a) goals were directly measurable or controllable, (b) there were

specific sales or profit goals tied to compensation, and (3) the environment was stable. Accordingly, a weak relationship was generally viewed as necessary and in line with the need for flexibility rather than avoidable and a negative source of ambiguity. This finding is also in line with the prescriptions of McCaskey (1974, about planning with goals versus directional planning.

For the aggregate sample, there was also a weak relationship between resource allocation decision processes and goal setting processes. Managers perceived that resource allocation decisions were made at a higher level in the organization than the establishment of goals. This perception is not surprising, for it coincides with other literature on organizational decision processes (Bower, 1970). The more critical finding was that resource allocation was also not tied to a formal system, as planning frequently was. This separation of resource allocation decision may have also led to the consistent complaints of resource contraints (see below).

III.C. Incentives and Disincentives

With the exception of salary, informal incentives were seen as more important than formal incentives. Intangible factors such as culture were mentioned as far more important in terms of both getting the work done and not getting it done; that is, as both incentives and disincentives. Interestingly too, middle managers were more apt to like informal aspects and want to change formal aspects of the organization. Overall, those interviewed considered the incentive and disincentive system equitable. These findings point to the continued need to expand the view of incentive systems that have been taken in the literature (cf. Peters and Waterman for a similar viewpoint).

DISCUSSION

I. Overview of Model

Throughout this study, we have focused on factors important for effective human resource planning in a large organization, considering the environment within which the organization operates, and its strategic business considerations. As any organization must operate within the constraints of its environment, it must learn to negotiate successfully with those constraints and capitalize on the opportunities afforded by that environment. Thus, an organization's strategic considerations are strongly influenced by its environment. In turn, the strategic considerations of the company affect the choice of human resource policies because human resource policies help determine the future effectiveness of the organization.

In this study, we have gone one step beyond matching strategy and human resource policy by collecting perceptual data from middle managers concerning the formal planning process, incentives (both formal and informal), mobility issues and the decision to remain with or leave the current organization. By comparing these perceptions with the formal processes set up by the firm, we gain insight as to where the formal policies coincide with perceived practices and where they diverge. Further, we look here at differences across the six sites in this study in terms of environmental demands and strategic direction, and link deviations in the perceptions of the middle managers to these differences. In this way, we point out critical connections among the environment, strategy, formal policies and perceptions of policies.

A model of these key factors and the way in which we have analyzed and compared them within and across organizations is shown below.

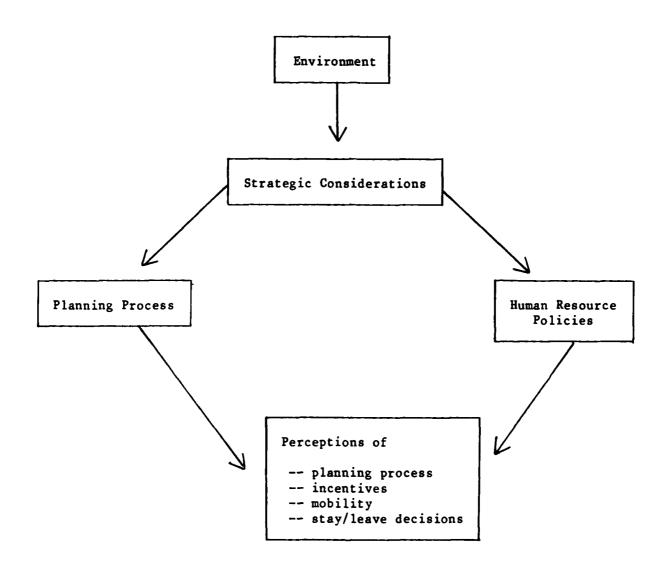


EXHIBIT 5.1

FACTORS WHICH AFFECT PERCEPTIONS OF HUMAN RESOURCE PRACTICES

II. Environment

The organizations which participated in this study were chosen so that there were both similarities and differences across sites in the business environment within which the organization competes. These dimensions were summarized in the Introduction to the Case Studies. In terms of competitive position in their respective industries, all six organizations are either industry leaders or are very close to the top of their industry. There are also relatively high barriers to entry in the case of each of the industries of relevance here. In all but one case, the companies are mature and have a mature product or family of products (Metro Credit is in a stage of adolescence in comparison to the other organizations). The environmental features on which the organizations differ are summarized in Exhibit 5.2.

II-A. Organizational Customer/Product Orientation

Three of the companies operate in an industrial market rather than in a consumer market. That is, their primary customers are other institutions rather than individuals. These firms include Sky Technologies, Metro Credit and the Navy, where in the case of the Navy, the primary "client" is the U.S. Government. The companies in the study whose primary customers are individuals include Leisure Products and Metro Bank. Middle Bank operates in both markets. The financial services companies (Metro Credit, Metro Bank, and Middle Bank) and the Navy provide services, while Leisure Products and Sky Technologies make products.

71-B. Competition

Ľ

These organizations also differed in terms of the number of major competitors they face. For the Navy, Sky Technologies, and Leisure Produts, there are few competing organizations for market share and customers.

However, Middle Bank, Metro Credit, and Metro Bank have many competitors in the marketplace already, and this number will only increase as banks expand into other financial services areas.

II-C. Stability and Regulation

The Navy, Sky Technologies and Leisure Products operate in quite stable environments while Middle Bank, Metro Bank and Metro Credit must deal with a highly turbulent environments as a result of the deregulation of the banking industry. Part of this deregulation has resulted in numerous mergers, divestitures, and bankruptcies. In contrast, the Navy is still highly regulated and the aerospace industry is indirectly regulated. The industry in which Leisure Products operates is not regulated at all.

II-D. Technological Demands

Finally, in terms of the technological orientation required by each company's environment, both the Navy and Sky Technologies require a highly technological orientation. For both of these groups, it is important to be on the leading edge of technology for success in their respective environments. However, the O.E. group within the Navy is working to add people concerns to the focus on high technology.

Leisure Products represents the other end of the spectrum in that it is not technologically oriented at all, while Metro Bank, Middle Bank and Metro Credit fall between in terms of technological demands. However, the demands on the financial services firms for the use of higher levels of technology are increasing.

EXHIBIT 5.2

COMPARISONS OF EXTERNAL ENVIRONMENTS

	Navy	Sky Tech	Leisure Products	Middle Bank	Metro Bank	Metro Credit
Industrial/ Consumer	I	I	С	I/C	С	I
Service/ Product	S	P	P	S	s	S
Number of Competitors	Few	Few	Few	Many	Many	Many
Organization's Position in Life Cycle	Mature	Mature	Mature	Mature	Mature	Adoles- cent
Stability	High	High	High	Low	Low	Low
Technological Orientation	High	High	Low	Low, but increasing		Moderate, increasing
Regulation	Yes	Indirectly	, No	Yes, but decreasing	Yes, but decreasing	Yes, but decreasing
Industry Rearrangements	None	Few	Few	Many	Many	Many

III. Strategic Considerations

After examining several of the important environmental factors for each organization in our study, we looked at the strategic considerations of each to determine the match between environment and strategy, and how various combinations of these two factors influenced resulting planning processes and human resource policies. The strategic considerations which we examined included those listed in the Introduction to the Case Studies. These issues are summarized in Exhibit 5.3.

III-A. Product Characteristics

The complexity of managing the market is to some extent related to the number of produts for which each firm is responsible. We selected our focal organizations so that they would be roughly comparable on this dimension. The focal organizations studied were all concerned with groups of related products.

In terms of the product life cycle for each company, the Navy, Sky

Technologies, and Leisure Products deal with products which have had long life
cycles, while the services provided by Middle Bank, Metro Credit, and Metro

Bank are fairly short-lived. Because of short product life cycle, product
innovation is important for success, for example, in Metro Credit and Metro

Bank.

The financial services companies (Metro Credit, Middle Bank, Metro Bank) also have much more direct client contact than do the other three organizations (Navy, Sky Technologies, Leisure Products), and are therefore more externally oriented.

III-B. Marketing Goals

There is a common competitive position among the Navy, Metro Credit and

Metro Bank, in that they are all considered to be very good at what they do. (Internal perceptions are that each of these companies are the "best in the world"). Middle Bank is considered to be the best financial institution regionally, and Sky Technologies is the best in its particular market niche. Leisure Products is excellent at selling an "image" and in so doing it also sells its product. It is intent on increasing market share, and consequently, achieving the number one industry position. In each case it should be noted that there is a definite strategy for excellence in some market segment or geographical area. This appears to be an important feature in these six successful companies.

III-C. Keys to Success as an Organization

In several cases, we found that innovation played a large role in defining success for the organization as a whole. This was especially true for Sky Technologies, Metro Credit and Metro Bank, where their ability to remain on the leading edge of the industry's frontier of knowledge enabled them to remain industry leaders. For Metro Credit, innovation in terms of new produts offered to customers was the key, while for Sky Technologies, innovation and technical excellence were both extremely important. Metro Bank relies also on innovation with regard to its products as well as on its past and continuing reputation for quality. Innovation did not play as large a role in defining the keys to success for Leisure Products and Middle Bank. For those two firms, the important keys were marketing excellence combined with efficient production and prudent service, respectively.

III-D. Divisional Structure

Each organization was quite different in its basic formal structure.

Leisure Products was arranged along functional lines. Middle Bank and Metro

Bank were also organized along one basic dimension, product and region, respectively. The Navy and Metro Credit were decentralized in terms of geographic location and then further subdivided into product or specialty. The most complex arrangement occurred in Sky Tech, which follows a matrix structure in which product and function are both key reporting lines.

III-E. Dimensions of Centralization

There is a centralized human resource function in each of the sites studied here, as well as a centralized strategic planning group in the Navy, Sky Technologies, Leisure Products, and Middle Bank. The Navy is also centralized in terms of financial control. Metro Bank and Metro Credit are relatively decentralized with the exception of human resource planning.

III-F. Driving Forces and Strategic Initiatives

The six organizations vary widely regarding the major driving forces within the firm. The Navy is very "systems" driven, while Sky Technologies is driven by technology and Leisure Products by its image. The major driving force at Middle Bank is the top management (particularly the CEO), and Metro Credit and Metro Bank are quite strongly driven by their need to have the most current information about the environment and the changing demands of the industry.

Strategic initiatives originate at the top of the organization for all of the sites with the exception of Metro Credit and Metro Bank, in which initiatives may occur within the region.

EXHIBIT 5.3
STRATEGIC CONSIDERATIONS

	Navy	Sky Tech	Leisure Products	Middle Bank	Metro Bank	Metro Credit
Single/ Multi Product	Group of related products	Group of related products	Group of related products	Group of related products	Group of related products	Group of related products
Product Life Cycle	Long	Long	Long	Short	Short	Short
Keys to Success	Technical excellence Committed personnel	Technical e excellence Innova- tion	Marketing excellence	Prudent service	Quality products Reputation Innovation	Innovation in products
Formal Struc- ture	Region Specialty	Product Function	Function	Product	Region	Region
Dimen- sions of Centra- lization	Financial Strategy HRP	Strategy HRP	Strategy HRP	Strategy HRP	HRP	HRP
Strategic Initia- tives	Top	Тор	Тор	Тор	Region	Business heads
Driving Forces	Systems	Technical	Image	Top management	Info	Info

IV. Planning Processes

Since strategic planning in large organizations is the primary way in which goals are disseminated, we first looked at the way in which overall planning is accomplished in each company. Only then was it possible to see how planning for human resources fits into the planning process and strategic direction of the firm. Further, planning policies and practices provide important information about how companies implement their strategic initiatives and how they link with human resource practices.

We found there to be very few differences among the formal planning policies across the organizations in this study, although the manner in which these policies have been implemented varied markedly. In each case, with the exception of the Navy, formal policy dictated an iterative process whereby top levels of management formulated overall plans and objectives and then passed them down to the middle layers of management. Middle managers responded with unit plans, passing them back up to top management, receiving a response, etc. A final plan was achieved after several iterations back and forth between top and middle managers. The formal description of this process did not vary significantly among the five corporate sites.

However, implementation of the policy did vary across sites. In terms of the amount of input accepted from lower management levels, Metro Bank and Metro Credit ranked highest, while in the Navy, Leisure Products and Middle Bank, little input was allowed from middle managers. Also, divisional heads had more authority in Metro Bank and Metro Credit than in the other organizations. Finally, the role that top management played in the planning and goalsetting process differed across sites. Within Middle Bank, the Navy, and Leisure Products, in particular, virtually all important decisions were made by corporate management. Only in the Navy was this practice consistent with formal policy.

V. Human Resource Policies

Policies and practices concerning human resource planning within the organization varied widely across organizations for several key human resource factors. We looked for differences in (1) selection and placement, (2) appraisal, (3) development, and (4) reward. These policies and practices are summarized in Exhibit 5.4.

V-A. Workforce

The types of individuals who make up the workforce in Middle Bank, Metro Credit, and Metro Bank are very varied. There are individuals who have worked up through the ranks from their teenage years and there are also MBAs who have joined the firms right out of business school. In contrast, Leisure Products seeks to hire only the best and the brightest MBAs (paying higher salaries than most) with a definite bias towards sharp, young individuals. Sky Technologies looks for those who have the technical expertise to do the work required, and they usually are highly educated and technically trained employees. Those who join the Navy must be fairly young and willing to accept the challenges and rewards of Navy life.

V-B. Salary Level

Salary level was found to vary across the participant organizations in our study, both in an absolute and relative sense. In the Navy, salary level is quite low when judged against comparable jobs in civilian life. Both Sky Technologies and Metro Bank pay the industry average. The salary level at Middle Bank is commensurate with the regional average. Leisure Products, on the other hand, pays high salaries compared to the national market. In each case, salary level appears to fit with the strategic considerations of the firm. For example, Leisure Products is highly concerned with selling an

explosive image, and high salaries enhance such an image. On the other hand, the Navy and Sky Technologies offer many other advantages for associating with them (benefits, travel and the chance to work on the frontiers of knowledge in advanced areas, for example). Therefore, salary level per se is the industry average (Sky Tech) or low (Navy).

V-C. "Fast-Track" System

In two of the organizations there was a formal visible "fast-track" policy; i.e., a system whereby high potential individuals are identified and tracked over time. These two companies were Sky Technologies and Leisure Products, while at the other four firms, no formal program was widely acknowledged.

V-D. Internal/External Mobility

The rate of mobility internally as well as externally varied across organizations, depending on industry, job definition and level of difficulty of the job. In the Navy, individuals changed jobs every three years with little mobility out of the organization until the tour of duty was over. Sky Technologies was found to move people internally quite slowly from job to job, because there is a project orientation and projects tend to be lengthy. There is also little movement out of the company for Sky Technologies, and this rate of movement often depends on where there is contract work available and on the condition of the economy rather than on internal factors. Sky Technologies is the only organization in which a favorable view is taken of employees who leave the company and return in a few years, often at substantially higher levels and salaries. Due to the nature of the work there (the project orientation), however, this policy makes sense and probably works to the advantage of all involved.

At Leisure Products, mobility internally is fast (every 12-18 months).

Further, individuals also move quickly out of Leisure Products and back into the job market (often within five years of going to work there) as they reach what the company considers to be their highest potential levels. Since former Leisure Products employees have a very good reputation externally, they believe it is no problem to find another job. Furthermore, the company provides outplacement assistance.

At Middle Bank, both internal and external movement are slow. There is little reason to move quickly through jobs within the firm, and since this firm is considered by its employees to be the best in the immediate regional area there is little external movement. Within both Metro Credit and Metro Bank, job movement is average, with employees changing jobs every 2-3 years. In these organizations, responsibilities associated with jobs frequently expand and evolve over time, but jobs do not change. Therefore, movement per se is somewhat misleading. There is also some movement out of these firms, sometimes to another part of the corporation (especially if leaving Metro Bank) and sometimes to other market firms (especially if leaving Metro Credit).

V-E. Succession Planning System

The Navy and Leisure Products have the most highly systematized succession planning. Sky Technologies also plans for future succession in a formal way but only for the select few who are identified early as being part of the fast-track systems (the "stars"). Within the other three organizations (Metro Credit, Metro Bank and Middle Bank), there is no formal succession planning system at the middle manager level.

There is some type of formal review process carried out for all middle

managers at each of the organizations, although the details of how they are conducted vary somewhat by site.

V-F. Training

There is variation across firms in the amount of training that managers receive through their companies (such as workshops, courses, etc., but not onthe-job). Sky Technologies and then the Navy provide the highest level of training among our sites, which is consistent with the highly technical nature of their work. Leisure Products and then Middle Bank provide very limited training, also as might be expected, based on the fact that job definition is narrow or specific job expertise is learned during a long tenure on the job. For Metro Bank and Metro Credit, there is a moderate to high-moderate level of training provided, respectively. This seems to be increasing as the environment changes and more technical demands are put on the mangers. In every case, however, the amount of training appears to match the strategic needs of the organization. Technical expertise and competition demand that the Navy and Sky Technologies train their people, while in Leisure Products and Middle Bank there is little need for specialized training. Rather, those managers need more generalized marketing and managerial skills that are learned through the job. As the banking industry becomes more technical and Metro Financial Service, Inc. attempts to retain its industry leader status, there will be an increasing need for technical and other specialized training programs for the managers there.

V-G. Bonus Possibilities

Finally, an aspect of human resource policy that is important in some of these organizations is the amount of money managers have at risk based on how well they do their jobs. In most cases, there is no money at risk for middle managers; e.g., in the Navy, Sky Technologies, Middle Bank, and Metro Bank. However, within Leisure Products and Metro Credit, there is a range of possible money at risk. For Leisure Products managers, target volume must be met in order to ensure that Leisure Products does not give up any market share points. Therefore, this highly competitive company ties some bonus money to the manager's ability to make target amounts. Within some parts of the Metro Credit, much of a manager's success depends on individual ability to put viable deals together to satisfy customer needs. Therefore, in this business, bonus incentive systems help create an equitable system of payments.

EXHIBIT 5.4

HUMAN RESOURCE POLICY

	Havy	Sky Tech	Leisure Products	Middle Bank	Metro Bank	Metro Credit
Work- force	Young	Technical Highly educated	МВА	Open	Open	Open
Salary	Low	Industry average	High	Local average	Industry average	High (Internal) Low (Market)
Fast- Track System	No	Yes	Yes	No	No	No
Mobility:						
Internal	3 yr.	Slow	Fast	Slow	2-3 yr. evolve	2-3 yr. evolve
External	None	Little (return policy)	High	Little	Little	Some
Succes- sion Planning	Formal	Formal for select group	Formal	Informal	Informal	Informal
Training	High	High	Low	Low	Moderate	Moderate- high
Bonus Possibi- lities	None	None	Some	None	None	Variable (some high)
Formal review Process	Annual	Annual	Annua l	Annual	Annual	Annual

VI. Perceptions of Middle Managers

Up to this point we have noted similarities and differences across organizations in terms of the environment in which they operate, strategic considerations, the formal planning process and the formal human resource policies as stated by the companies. We now analyze the perceptions of the middle level managers, who were the primary participants in our study, in light of the objective factors discussed above. In particular, we focus on the match or mismatch between the formal policies and the perceptions of those policies concerning the specific issues of the planning process and human resource management. We then discuss several informal job characteristics which appear to be motivating factors in several of the companies, but about which there is no acompanying formal policy. These features include (1) the nature of the work itself, (2) image/culture, (3) lack of resources, and (4) degree of "enclosure" of the organization.

VI-A. Perception of Formal Policies

In this section, we compare the perceptions of the middle mangers who participated in this study concerning their respective organization's formal policies and procedures in relation to the formal policies as stated by the organizations. In so doing, we can determine whether or not there is a good fit between these formal policies and the way in which those who live by them see the policies.

A-1. Planning and Middle Manager Participation

One measure of participation in the planning process by middle managers is the amount of business information that is generally available to the managers (Mintzberg, 1979). We found that the Navy and Middle Bank personnel had the least amount of strategic information available to them, while

Metro Credit and Metro Bank mangers were found to be most aware of critical business issues (i.e., have more information). This corresponded to managers' perceptions of how they learned what their unit's goals were, which represents a second way of evaluating degree of participation in planning. While Navy and Middle Bank personnel rated top management highest for source of information about goals, Metro Bank and Metro Credit more often learned about goals from their supervisors or helped develop the goals personally. Leisure Products and Sky Technologies fell in the middle on both counts; some business information was available to the managers there and planning was done partially by top management and partially by the managers themselves.

An interesting parallel here is that the firms in which middle managers were more highly involved in the planning process also operated in more highly competitive markets than did the other organizations. For instance, Metro Credit operates in a very competitive arena and must be very aware of what the competition is doing to succeed, while the relevant markets for the Navy and Middle Bank are less competitive and demanding on a day-to-day basis. As the competitiveness of the market increases, a higher level of participation in planning by middle level managers is warranted to keep abreast of (and hopeful ahead of) the competitors, particularly when product innovation is a key to success. This trend is in line with an information processing view of organizations (.e.g, Galbraith, 1977) and issues of boundary spanners (e.g., Adams, 1976), which suggest that in highly competitive situations, organizations must have mechanisms in place which are constantly monitoring the boundary lines between the firm and its environment. By so doing, the organization picks up vital information about changes in the environment and competitive conditions to which it needs to respond to maintain a leadership position.

In terms of resource allocation, top management was seen as very important for Sky Technologies and Middle Bank managers, somewhat important in Metro Bank, Leisure Products and the Navy, and least important by Metro Credit mangers. Within Metro Credit, resource allocation is perceived to be under the control of the managers themselves compared to the other organizations. It is interesting to note that the highest proportion of individuals who did not know who allocated resources was found in the Navy.

In summary, within all of our participating companies except the Navy, there was some type of "mismatch" between formal planning policies and the perceptions of actual planning practices. The way that this mismatch occurred, however, differed across organizations. There was also a discrepancy between theory and practice in the link between goal setting and resource allocation. Theoretically, resource allocation should be done so as to match resources to task; however, most managers felt that the actual resource allocation process in their organizations fell far short of that. There was accompanying frustra-tion because of the lack of resources available with which to do the job.

A-2- Salary and Benefits/Compensation

Salary was explored both in terms of being a motivator on the job and in terms of whether people noted that they liked or disliked salary levels in general. The latter probably reflects the salience of salary to the respondent. Where salary was found to be a highly motivating factor, as might be predicted, salary levels were high. We found that salary served as a strong motivating force for Leisure Products and Metro Credit (both of which pay high salaries), somewhat as a motivator for Metro Bank and Middle Bank (salary levels are average to good), and was not considered a motivator within Sky Technologies and the Navy (relatively low salary levels). However, in

comparing the managers who said they liked the current salary, Leisure

Products was again at the top of the list, while Metro Credit was very low

along with the Navy. The other four organizations were all in mid-range in

terms of salary as a characteristic they liked about the organization.

These data match quite well with the human resource policies set up within each company and, therefore, with the concepts of internal and external pay equity (cf. Lawler, 1981). For example, Leisure Products ranged highest and Navy and Sky Technologies lowest in terms of actual salary level. It is interesting to note that although Sky Technologies ranked salary low as a motivator, those mangers also reported liking salary. Similarly, but in the opposite direction, Metro Credit reported not liking salary level, but found it to be a motivating factor. Reasons for these findings center around other features of each organization. Within Sky Technologies, a high emphasis is placed on the type of work by employees, so salary is perceived to be less important. For Metro Credit managers, salary is perceived to be equitable inside the corporation, but is lower than the comparable market wages and so is not particularly liked.

A-3. The HRM System and Mobility

The human resource management system within each of the participant companies varied as to how highly visible and important it was to middle managers. We found that this system was most visible in the Navy, Sky Technologies and Leisure Products, while managers within Metro Credit, Metro Bank and Middle Bank saw it as less visible. When these sets of organizations are compared regarding certain aspects of their respective environments, two interesting patterns emerge. First, within the companies which operate in a highly turbulent environment, the HRM system plays a less obvious and visible role than for those organizations which exist in a stable environment. The

Navy, Sky Technologies and Leisure Products operate in relatively stable environments while all of the financial services companies face a turbulent environment. Further, those organizations which face turbulence also tend toward less definite job definitions than do the companies which operate in a stable setting. The perceived need for flexibility and quick adaptability, then, seems to be manifested in less fixed, less formal (and therefore less visible) HRM systems.

The general rate of mobility within organizations also represents a match between formal policy and perceptions of practice. As was noted in Exhibit 10-3, the firms within which movement is slow reported perceptions of little movement as well. For example, the mobility policy within Leisure Products is rapid and the perceived movement was fast as well, while within Middle Bank and Sky Technologies, both actual and perceived mobility were relatively slow.

In examining the perceptions of the formal "fast-track" systems that exist only within Leisure Products and Sky Technologies, there is a dichotomy in terms of the salience of these systems between these two organizations. For Sky Technologies, 45 percent of the middle mangers interviewed mentioned the formal HRM system as something that they liked, while within Leisure Products, almost three-fourths of the participants mentioned HRM as something that they disliked. In both cases, there is a high degree of salience of the formal "fast-track" HRM system, but the feelings about these systems are at opposite ends of the spectrum. This difference depends largely on the way in which the system is implemented in each site, which in turn depends on the corporate culture which exists in each company. As will be discussed in the next section, the cultures of Leisure Products and Sky Technologies are very different, and play an important role in how human resource policies are practiced and perceived.

A-4. Training

Knowledge is a prerequisite to intelligent decision-making and involvement in decisions results in greater knowledge of work needs and operations. Moreover, an organization committed to employee participation should also be committed to developing their human resources in other ways. For example, they should be more interested in retaining a dedicated work force, which, in turn, would imply the need for continued training and retraining (Walker, 1980). Hence, we would then predict that participation in strategic/business decision, the strength of a promotion-from-within policy, and the resources devoted to providing educational opportunities should covary. Surprisingly the three factors are not well aligned.

Except for the Navy, the rankings between a promote-from-within philosophy and formal training opportunities did not mesh. After the Navy, promotion from within was highest at Metro Bank, then Middle Bank, then Sky Technologies, then Metro Credit, and lastly, Leisure Products. In contrast, after the Navy, the most resources were devoted to formal training in Sky Technologies, then Metro Credit, Leisure Products, Metro Bank, and finally Middle Bank. Clearly the need for training to do one's job at least moderates the relationship between internal development of personnel and formal training programs.

The more interesting divergence is between participation and promotion from within. Participation was highest at Metro Bank, then Metro Credit, Leisure Products, Sky Technologies, Middle Bank, and finally, the Navy. In contrast, organizational tenures were highest in the Navy, Metro Bank, Sky Technologies, Metro Credit and Leisure Products, respectively. It appears that the two concepts are unrelated. While participation is predicated on employee understanding and agreement with organizational objectives (Vroom and

Yetton, 1973), dedication to employee development does not seem to be essential to this agreement. Conversely, while long organizational tenures should result in greater knowledge and acceptance of the organization's mission and operations, participation does not have to follow from this knowledge and acceptance.

There was also an interesting mismatch between formal training practices and perceptions of training. In general, organizations which offered extensive or limited training options were accurately perceived as such. The exception was Leisure Products which has few formal courses, yet, in comparison to other firms, was perceived as providing moderately high training opportunities. This departure can be explained in terms of the match between the course content and the skills that are most associated with success. Personal image is considered to be one of the most important professional assets in Leisure Products, and the few courses offered are almost all devoted to improving personal presentation skills.

A-5. Selection

The six organizations fell into two clusters regarding a number of organizational and environmental features. Average actual education level of participating middle managers was higher in the Navy, Sky Technologies and Metro Credit than in Metro Bank, Middle Bank and Leisure Products. Also, within Sky Technologies, Metro Credit and the Navy, there was a more highly technological orientation than in Metro Bank, Middle Bank and Leisure Products, and more formal training. This correlation among factors comes from the fact that within companies that are geared toward technical products or services, there is a need of highly educated individuals and for continual training of those individuals to keep them abreast of latest technical

developments in the field. Thus, the firms cluster according to education level, amount of formal training and technical orientation of the organization.

In terms of workforce's educational level, it is highest at Sky Technologies and Metro Credit, which fits the technical demands of those organizations. Education level is lowest for Metro Bank and Middle Bank which also matches policy in general, in that a wide variety of individuals make up the workforce at those institutions. Further, the perceived value of education to other firms in the market is highest for the Navy and Sky Technologies, again representing the constant demand for highly technical orientation and ability. This perceived value is lowest in the case of Middle Bank and Metro Bank.

B. Perception of Informal Practices

In the preceding section, we compared perceptions of several formal policies with the policies as stated by the organization. During the course of this study, we also noted that there were several aspects of their organizations which were very important to our middle manager respondents, but for which there was no formally stated policy. These dimensions are summarized here in terms of how each one is perceived by the middle level of managers and why each dimension is important.

B-1. Importance of Work Itself

Within two of the organizations, managers saw the work itself as a very positive feature. In both the Navy and Sky Technologies, over three-fifths of the participants mentioned that what they like about their jobs was the challenge and excitement of the work. In contrast, less than two-fifths of the managers from Middle Bank mentioned that the work itself was something that they liked. Individuals at Metro Bank, Metro Credit and Leisure Products

fell around the fifty percent mark in terms of mentioning the work itself as a valued characteristic of their job.

This finding appears to be highly correlated with the nature of the industry and type of work in which the firm is involved. Both the Navy and Sky Technologies have a highly technical orientation and their work forces reflect this interest, in that many Sky Technologies' managers are engineers and highly educated in their fields. Within the Navy, individuals receive a high level of training on the job which is often of a technical nature. On the other hand, the firm which is lowest on the technical scale in terms of the work required is Middle Bank. There, work itself is not nearly as important a factor.

Although this aspect of an organization is not "managed" directly, we found it to be an important factor in some organizations in terms of its effect on managers' perceptions of their jobs and employing companies. What many managers found motivates them on the job, and therefore keeps them linked to the organization, is their genuine interest in and affinity for the type of work they do.

There is also a strong parallel here between liking the work for the work itself and feeling motivated by that work to do well on the job. The exception to this rule is the Navy, whose people report liking the work, but do not report it as being highly motivating. This may be due to the fact that there are many other more salient features within the Navy in terms of motivation, and the work itself can change across various tours of duty. That is, since the work varies, individuals join the Navy for many other reasons than for the work itself. In general, for the managers in a technically oriented firm, the work itself is a more important factor concerning what is liked about the job and what motivates managers than in less technical organizations.

B-2. Importance of Image/Culture

r

1)

We also found that the culture of an organization is a very important factor in terms of a manager's attachment to the organization. Within the sample of individuals from Leisure Products, over 65 percent mentioned that the company's culture was something that they liked about the organization. This was followed closely by Metro Credit, Middle Bank and Metro Bank (59%, 58%, 55%), where culture and the image of working for those organizations was perceived to be a very positive feature. Interestingly, image/culture was less important to the two organizations where work itself was important. Navy and Sky Technologies personnel mentioned cultural aspects of their organizations, but not nearly as often as did the other four companies. One other point of interest is that Leisure Products managers also rated image/culture within the firm as a factor which they did not like (as well as something that they did like). Close to half of the participants described it as something that they would like to change within the company.

This split, in terms of the culture as a salient aspect of the company, parallels the classification of these six sites as to whether their primary client is an industrial firm or a consumer. Leisure Products, Metro Bank and Middle Bank are all more consumer-oriented than are the Navy and Sky Technologies. It appears that in selling products or services to consumers, there may be a greater awareness of the overall image which the firm projects in order to sell the product in the marketplace.

By separating the participant organizations into those which are primarily service companies versus those which are not, an interesting pattern appeared regarding the importance of a company's image, and what the company provides, services or products. The service firms in this study include Metro Bank, Middle Bank, their Navy and Metro Credit, while Leisure Products and Sky

Technologies are primarily product oriented. Managers in the service companies believed that their organization was the "best at what we do." This seemed to be a critical aspect of being able to sell the company's services, in that the managers doing the selling have already been sold themselves. It seemed natural to sell the image of the company ("best in the world," "best in the region," etc.) as a way of selling the service. The managers working for Metro Bank, Middle Bank, Metro Credit and the Navy all felt a tremendous amount of pride in their associations with their companies, and conveyed the sense that they believed in what the company was doing for its customers. Therefore, loyalty seemed high at these places and the culture was a pervasive factor.

B-3. Lack of Resources

U

When managers were asked about the allocation of resources within their respective companies, it was interesting to note that they all reported themselves as highly resource-constrained. This was evident in several ways.

When asked what types of obstacles got in the way of achieving goals on the job, a larger proportion of managers within the Navy, Sky Technologies and Middle Bank reported constrained resources than any other factor. This was also a critical factor for Metro Bank, Leisure Products and Metro Credit. This pattern corresponds to managers' perceptions of who plays the largest role in deciding who receives resources within the organization. Within the Navy, Sky Technologies and Middle Bank, the resource allocation decision was perceived to rest almost exclusively with the top levels of management, while managers in the other three firms felt that they and their immediate bosses had much more to say in this decision. Therefore, the further away from the middle manager the resource allocation decision was made, the more aggravated was the middle manager about being constrained by lack of resources.

B-4. Degree of "Enclosure" of an Organization

Organizations can be described as being self-enclosed, as open, or as some combination of the two extremes. This represents how much reliance the company places on its environment for vital information with which to carry out its mission. In this study, there were two organizations which appeared to be quite enclosed (from the perspective of the middle manager), in that they were fairly self-contained and did not rely heavily on external sources of information for survival. These two companies include Sky Technologies and the Navy. When an organization is enclosed it often sets up its own strong internal systems of rewards, communication and "signals" about various factors within the company. We found that for the two "enclosed" organizations, there was much less response to our informal signals in terms of what the signals meant to the mangers involved, and the importance placed on these messages. This follows from the degree of systematization within the firms already, and the strength that these formal systems have on perceptions.

On the other hand, the organizations which were fairly open and relied heavily on the environment for information reacted more strongly to the informal signals presented to them. This may be due to the fact that these individuals are used to receiving and interpreting "signals" from a variety of sources, both internally and externally, and having to seriously evaluate each of them in case they provide valuable information for use on the job. In any case, there was a strong parallel between the strength of the reactions to the informal signals presented and the degree of enclosure of the company.

IMPLICATIONS

In this chapter we discuss the implications of our results, both for human resource managers and for organizational researchers. Following the organization of previous sections, we first address issues which are tied to formal human resource policies. We then draw out implications which appear to be connected to general characteristics of the organizations we studied. Where appropriate, limitations of the findings to specific types of organizations are noted. Next, we specifically address the implications of our research for the Navy. Finally, we suggest several research issues that merit further investigation.

I. General Implications

A. Work Life Satisfaction

The generally positive view of the participating organizations by middle managers is consistent with our expectations of satisfaction with work life in effective organizations. Literature on the relationship between satisfaction and performance is abundant (cf. Lawler, 1973; Porter and Steers, 1973). Although the direction of causality is not straightforward, satisfaction and performance are positively correlated. When individuals in organizations are both satisfied and performing well, organizational effectiveness becomes possible (Katz and Kahn, 1978).

Further, the satisfaction of managers confirms our sample as a selection of successful organizations with generally good human resource practices. At the same time, it is evident from the case studies and other data presented that these organizations vary widely in their raific human resource practices. This variation indicates that there is no one correct way to organize and implement human resource policies. Rather, choices among the

alternatives depend on strategies, goals and organizational context (Kotter, 1978, Lorange and Murphy, 1984).

B. Resource Constraints

Across virtually all of the organizations we studied, middle mangers saw themselves as resource constrained. However, we noted important differences in the intensity of feeling about this constraint. Within organizations in which planning and resource allocation were limited to top management, middle level personnel were more likely to see the lack of resources as impediments to the accomplishment of their tasks than in organizations in which middle managers participated in allocating resources. This pattern can be explained in two ways. Organizations which involve middle managers in planning may be objectively less constrained in terms of resources. Or, involvement in planning encourages individuals to affect or accept resource allocation. This latter interpretation is consistent with normative management theory which recommends MBOs and other interactive planning processes (Ilgen and Feldman, 1983; Lorange, 1980).

C. Mobility

One of the human resource practices which we studied most extensively was mobility. In many organizations, decreasing mobility is a difficult but necessary result of shrinking middle manager ranks (Fortune, 1984; Business Week, 1983). Our findings suggest that these organizations need to alter the culture that surrounds movement and manage expectations of mobility as well as change the rate of movement itself.

Furthermore, companies may choose to alter job definition to provide development opportunities without job change. Specifically, our findings indicate that in organizations where movement from position to position was

rapid, jobs were clearly and narrowly defined. In contrast, in organizations where movement across positions was slower, job definition was less rigid and jobs evolved over time. Thus, while the literature on job descriptions prescribes clear and specific task assignments (Walker, 1980; Fine and Wiley, 1971), our data suggest that the specificity of job definition presents different mobility options. Organizations which need to slow movement, then, may choose to have middle managers to grow within positions by allowing an evolution of job definition rather than by developing managers through rapid movement across positions.

D. Salary

Of the formal human resource practices, salary was most salient to our respondents. The importance of salary to middle mangers has been debated in the literature (Lawler, 1981). In general, the debate has focused on whether middle managers have satisfied the primary needs (e.g., physiological, safety and security) which salary addresses. Lawler (1981) has argued that salary is an important signal which serves needs other than security. Our data support his position that salary level can act in secondary as well as primary ways.

Although salary was the most salient formal human resource practices in all organizations, the perceived importance of salary differed across organizations. In organizations where salary was high relative to market, salary was more often noted as a motivator than in organizations where salary was set at market levels. In organizations where salary was salient, middle managers reported it to be the measure of their performance. In those organizations, title was often perceived to be irrelevant, a matter of time in grade, while salary level conveyed information about judged performance. These findings suggest that organizations can alter the perceived importance

of salary, at least within certain ranges. In all participating organizations, salary levels were set at or above market levels. Hence, it is possible that the same flexibility may not be possible in organizations in which salary policy is set below the mean of the market. Specifically, once salary level falls below an individual's market wage, the individual will leave his current job for another (Lippman and McCall, 1979).

E. Succession

The organizations in our sample had a variety of ways of managing succession, promotion and development. In some, this process was very formal and systematized, while in others the formal system was widely ignored. When systems were formal, they had greater salience than when they were not. However, this salience was in one case positive and in another, quite negative. In general, organizations which had very formal systems operated in relatively stable environments, and middle managers were buffered against change. Organizations with turbulent environments did not adhere to formal human resource planning systems. It may be that adherence to formal systems is not possible in a fluctuating environment, or that adherence would be ill advised because it limits flexibility. Support for this idea from the literature on organizational structure and external environmental conditions is abundant (cf. Miles, 1980; Mintzberg, 1979).

F. Involvement in Planning

We also found that in organizations where middle mangers were involved in business planning, those same middle managers had a more external orientation than managers working for organizations in which such involvement was not evident. If organizations operate in an environment which requires

middle level personnel to be externally oriented, involvement in planning may serve as a mechanism by which such behavior can be encouraged.

G. Importance of the Task

We found that the work itself was extremely important to a number of our respondents. The organizations in which this occurred had highly or specifically trained workforces. This finding is consistent with past research findings that professionals are more likely to be motivated by the task than non-professionals (cf. Haynes, 1977). Moreover, because innovation is a highly valued professional activity (cf. Drazin, 1981), this further suggests that organizations which are technologically oriented can suffer if they slip from the leading edge of technology. The best personnel would leave and thereby produce a downward spiral of decreasing technological competence.

H. Impact of Reorganization

We know from previous research that dramatic organizational change is incorporated into organizational memory and therefore can have far ranging effects (Duncan and Weiss, 1979; Kimberly and Quinn, 1984). We saw evidence of this in the cases of two organizations studied which had recently undergone reorganizations. One of them involved a substantial layoff of personnel, which was startling in light of the organization's previous policies. A year later, when our study took place, this event was seen as having positive effects for those that remained. In the other organization, although few layoffs actually occurred, perceptions of many organizational aspects altered for the worse. In this latter instance, the reorganization was taking place during the course of our study, and there was a great deal of uncertainty associated with it. Despite strong safeguards against layoffs, respondents

still felt at risk. In both cases, the effects of the change were pervasive. Similar organizational changes need to be managed carefully and communicated clearly to ensure appropriate interpretation.

I. Culture

0

In addition to an emphasis on human resource planning, we found that our organizations had distinctive and, in most cases, strong cultures. These organizations seemed as effective at selling the organization to employees as to customers. Internal marketing may be especially critical in service organizations, where the production and marketing of services occur simultaneously (Berry, 1980; Donnelly, 1976; Weinberg, 1977; Bellardo, et al., 1980). In a service organization, employees who are not convinced of the value of the firm, nor committed to it, may not be as effective at providing services or convincing customers of their value. Because service customers have difficulty in assessing the worth of many services they buy (Bellardo, 1977), a strong commitment from employees to the service and to the organization which produces that service may be a critical element in marketing and, therefore, in the continued success of the firm. In underscoring this relationship, our data support the contentions of a number of recent writers on excellent organizations, such as Peters and Waterman (1982), Arbeit and Sasser (1976), and Berry (1980).

Culture affects many aspects of organizations, including the way in which individuals interpret and respond to signals sent by the organization.

Although our research indicated that the effects of various signal dimensions were relatively constant across organizations, there were also differences across organizations in managers' responses to the specific content of the signals. In addition, there were marked differences in the probability of

leaving reported by individuals in different organizations when identical signals were presented. It has been recently noted that the context within which decisions are made plays an important role in the decision making process (Kunreuther et. al., 1978; Kunreuther and Lathrop, 1981; Hogaith and Makrindakis, 1981). Since an organization's culture provides a very strong context for the interpretation of signals, different cultures should yield different decision outcomes (or at least different intensities about those outcomes) with respect to a given signal. Therefore, when signals are used by organizations to affect retention, either to retain desired employees or to encourage others to leave, it is important to take culture into account in assessing the likely response.

J. Service Organizations

Earlier we noted that those organizations in our sample which were service organizations were perceived by their managers as the best organizations of their class. This attitude prevailed even when the individual felt that he personally had limited job opportunities. Although we do not know how members of the organization came to hold this view, we strongly believe that this view contributes substantially to organizational effectiveness.

Therefore, service providers need to manage this aspect of their organization. This issue is addressed more comprehensively in the section on Directions for Future Research.

K. Innovation

Innovation is a key word for organizations. We found that organizations were most open to the outside in the arenas in which innovation was most essential to their success. In organizations which focused on technology, middle managers were provided with abundant training courses and other

learning opportunities from inside and outside which were designed to make technological innovation possible. In organizations where innovation was essentially market driven, middle managers were externally focused and very conscious of the environment in which they operated. This suggests that organizations must manage their boundaries so that new ideas from key sources continually flow into the organization.

II. Implications for the Navy

T

In the preceding section, we discussed the implications of our study for organizational effectiveness. In many cases, the issues which were raised also provide a context for better assessment of the match between strategic management and human resource planning within the Navy. These issues point to several possible actions to maintain system strengths and change system weaknesses. We discuss a number of these issues here.

For most military men and women, the Navy is an enclosed, self-sufficient system. Consistent with this orientation, little information about the overall direction of the Navy is disseminated to middle level officers, and there is no participation in the formal planning process by these middle ranks. Given that the Navy operates in a stable environment, the lack of involvement in planning is not a problem with respect to organizational effectiveness. However, it does present some potential negative consequences for boundary spanners; i.e., those Navy personnel who deal largely with individuals in the civilian sector, such as recruiters and contract monitors. These individuals need to be aware of environmental conditions and changes in those conditions in order to be effective in their jobs. In other words, for boundary spanners the enclosed nature of the Navy makes it more difficult to adapt and diffuse appropriate information because of the lack of contact with

the external environment and the lack of planning information.

Given that the Navy operates in an enclosed and stable environment, it is easy and appropriate for the Navy to utilize a highly formalized and standardized human resource management system. As already noted, a formal HRM system is neither automatically good or bad. We have found in other companies that rigid adherence to formal systems is not always efficient, particularly in those organizations which must operate in turbulent environments. In those cases, at least, it is sometimes better to treat the rules as guidelines rather than as strict rules. For the Navy, as long as it is operating under stable conditions and existing as a self-sufficient, enclosed unit, highly formalized systems seem to contribute to its effective operation.

One of the effects of the formality of the HRM system was evident in our research on signals and retention. We found that the formal signals provided by the Navy to its personnel are so powerful and clear cut that the informal signals investigated did not provide interesting or salient information. Therefore, those signals had little influences on stay/leave considerations. Moreover, whenever the two types of signals (formal and informal) were in conflict, the formal signals carried total weight.

However, the clarity of the HRM system also has unintended effects. One is connected with job rotation. Our results indicate that an individual consciously anticipates and manages the exit from one job and the entry into the next. Because tour durations are fixed and known, it is likely that the enlistee's or officer's personal separation response will be stronger than in organizations where job duration is unknown. Further, it is also likely that the subordinates, co-workers, and supervisors of the individual in the Navy setting anticipate the upcoming job change and may treat the departing individual as a "lame duck." Given the brevity of tours, this further

suggests that the productive time of an officer may be far lower than desired and mechanisms need to be put in place to shorten and smooth transitions.

Given the Navy's commitment to promoting from within and rotating personnel and its increasing emphasis on technology, it must continue to invest a high level of resources in training. This is especially true given the generally low levels of education of personnel entering the Navy.

Furthermore, in technologically oriented organizations such as the Navy, the quality of the work itself is important and appears to influence the stay/leave decision of personnel. Navy personnel indicated that what was particularly important for them in the job was the opportunity to do different challenging tasks and to become a generalist. Therefore, substituting or altering the nature of the work would not be in the best interest of the system. Moreover, as noted earlier, technical people like being on the leading edge, which further reinforces the Navy's need for training and for remaining committed to technical excellence.

The nature of the work itself is a non-explicit, formally designated aspect of an organization's motivational system. Many such aspects surfaced during our study. We found that, with the exception of salary, the key motivating factors for most middle managers were informal incentives and disincentives, such as corporate values. This was true within the Navy as well. There was a very strong commitment to the Navy and its mission on the part of most respondents, and the Navy's internal culture was highly rated as a motivating factor. Therefore, the data suggest the need for an organization to attend to internal processes and dynamics. This, in turn, implies that the Navy's OE Program offers a valuable service to the Navy because its mission is directed toward improving the quality of worklife through more effective communications, group and leadership dynamics, etc.

The issues of values and organizational culture are also tied to other concerns. First, because the Navy is akin to a service company, it is important for its employees to believe that the service being provided is worthwhile. We found that for other service companies a strong service or product is often the key to organizational success. Those that we interviewed in the Navy were clearly dedicated to the "Navy way." Therefore, the Navy should continue to be attuned to "selling itself" to its service men and women as well as to the outside world.

A corollary implication for the Navy is that sub-units within the large system need to be seen as consistent with organizational mission and values. To the extent to which the OE Program is perceived as part of the "real" Navy, officers and enlisted men and women will be committed to the Program's aims and activities. On the other hand, if the OE Program is perceived as inconsistent with the Navy's real mission, it will be difficult for the Program to maintain credibility.

The OE Program's discordance with much of the Navy's formal and cultural values makes it difficult for the Program to survive. On the other hand, the Program provides an avenue for change. When strategy and human resources management are tightly linked and structured, as they are in the Navy, system change becomes far harder to set in motion. Preserving some ways to alter the system should it become necessary is essential for long term organizational effectiveness.

III. Direction for Future Research

The research reported here has raised a number of challenging questions. In the sections below, we focus on four areas which we believe holf the most promise for innovative research of interest to the Office of Naval Research. The most significant addresses the connection between organizational effectiveness and employee perceptions of organizational effectiveness which we believe is so essential to service organizations.

Three other directions for future research are also suggested. One would explore the ways in which employees signal to employers and potential employers their intent to stay with or leave a job. A second proposes a systematic exploration of the relationship between mobility rates and job tenure, with an emphasis on the role that changing job definitions can have in altering expectations of mobility. The last would investigate the ways in which organizations manage subcultures with widely varying expectations for behavior, particularly organizations which have tightly coupled systems and which need units that have different standards for action.

A. Employee Perceptions of Effectiveness of Service Organizations

One of the more interesting findings of this research was that managers in the successful service organizations we studied widely believed their organization to be the best at what it did. This strongly positive attitude was not as widespread either among managers in the successful product providers we studied or among managers in less successful service organizations with whom we have worked.

Our respondents were managers from all functions within the organization, not only those in sales and marketing whose professional commitment is to the marketing success of the company. This suggests that an important component of organizational effectiveness for service providers is the employees' belief

in the quality of the service provided.

While the findings reported here do not explain why employee attitudes would be more important in service than in product organizations, a possible explanation is the general belief that the marketing of services depends more upon word-of-mouth and reputation than does the marketing of products. This difference is attributed to the fact that it is often difficult for customers to evaluate the quality of the services they seek because services are intangible. Therefore, a potential customer bases his choice of a service provider largely on what he has heard from others.

Even after making his choice, the customer still has difficulty judging the quality of the core service he seeks and therefore bases his evaluation on the provision of peripheral services, those which accompany the core service but are not those he initially chose to purchase. Provision of both peripheral and core services involves many members of the organization. The attitudes of all these members towards the service they provide will contribute to customer perceptions of the quality of the service and thereby affect the reputation of the organization.

Consider the case of a physician who works out of a hospital and who staffs her office with a nurse and a receptionist. Because most peop¹e do not feel qualified to evaluate the core service (the medical care itself), they tend to judge the doctor and make recommendations on the basis of such peripheral features as the attitude and effectiveness of the office staff, the general atmosphere of the hospital, including cleanliness, efficiency of the laboratory, and politeness of the personnel, as well as (or instead of) the quality of medical care.

The argument advanced above suggests that all members of a service organization must convey to customers (or other groups they serve) that the

core service provided by the organization is a good one. In the case of the physician, her staff would work to ensure that patients believe the doctor is competent, worth waiting to see, able to enlist the aid of hospital personnel to obtain auxiliary support for her patients, and so on. If the support personnel do not believe that the doctor provides good medical care, they might convey that belief to patients by the way in which they do their jobs. Patients might then come to question the competence of their physician and would not recommend her to others.

I

A number of interesting research questions follow from the analysis suggested above. First, because so little is known of the relationship between marketing and management in service organizations, it would be appropriate to systematically compare employee perceptions and consumer perceptions. The same information should be obtained from employees and customers of both product and service providers; firms should be selected which differ in market success. A comparison of these variables for successful and unsuccessful product and service organizations would clarify the connection between production and marketing of services and the role played by employee perceptions in determining market success. Recent work by Bowen and Schneider (in press), which compares employee and customer perceptions in different branches of a bank, suggests that this is a fruitful approach and one that should be extended.

When we better understand which attitudes of employees are most critical to success, and can characterize the organizations in which those attitudes prevail, we can meaningfully explore questions of greater managerial significance. For example, we can address what organizations can do to create or contribute to attitudes among its employees that will enhance organizational effectiveness.

B. Signals from the Individual to the Organization

The research reported here described the effect of signals from the organization on individual decisions to stay with or to leave the organization. In the Navy, and to a lesser extent in other highly structured organizations, these informal signals were less important than the formal signals provided by the organization. However, even within the Navy there are few formal signals from individuals to the organization with respect to their commitment to the organization. Therefore, a study of the ways in which employees signal their intentions to stay or leave would permit managers to invest in personnel who intend to stay rather than those who would prefer to leave.

Reading employee signals is particularly useful in discriminating between individuals who seek external opportunities because they wish to bargain and those who truly wish to leave. Signals to potential employers take such traditional forms as sending resumes, going through standard personnel channels, using personal contacts in other companies, building a market—wide reputation through publications or participation in professional organizations, or gaining high market visibility through particular project work at the current organization. Current employers can interpret such actions as intent to leave or intent to bargain; that is, employees sometimes use an external offer to negotiate an improved situation in their current organization. Therefore, both current and potential employers can benefit from other information which signals an employee's true intent to stay or leave.

C. Mobility Rates and Job Definition

One of the interesting findings of the research reported here was the

relationship between mobility rates and job definition. Specifically, we found that in organizations in which mobility was rapid, jobs were clearly and narrowly defined, while in organizations where formal job changes were less frequent, job definition was less rigid and more likely to evolve over time. This relationship needs systematic exploration over a greater range of companies and levels within companies. It is important because it suggests a way to address managerial development needs (by letting jobs evolve) when the rate of mobility needs to be lowered.

F

D. Managing Subcultures with Different Norms in a Tightly Coupled System Members of the OE Program within the Navy had clearly different job related values than those which they reported as typical of the Navy. In the main, these values appeared appropriate and necessary to the task. However, they were in conflict with the norms of the larger system. This kind of discrepancy is difficult to manage, but often necessary, particularly in organizations which need to change direction or focus.

To explore this issue, researchers could look for parallels to the OE Program in other organizations. For example, "skunk works" (intense new product development efforts which are isolated from the main activities of the organization) in computer firms, or entrepreneurial activity within well-established and conservative companies, or effective internal consulting teams in large organizations might provide the Navy with a picture of how these unusual subcultures can be allowed to grow and thrive.

SUMMARY

I. Overview of the Research

This research focuses on the match between strategic direction, human resource policies and the perceptions of those policies held by middle managers in successful organizations. Comparative case studies of five corporations and the Organizational Effectiveness Program of the Navy were prepared and analyzed. These case studies were based on formal documents, interviews, questionnaires and scenario evaluations; approximately 100 managers in each organization contributed to the findings reported here. The research focused on three issues: the effect of movement from one job to another on the division of work and responsibility between a manager and his boss; organizational signals which may affect the decision to stay with or leave the organization; and the relationship among planning, goal setting and incentive systems. These issues were addressed by three different studies, each of which is discussed below.

II. The Effect of Movement from One Job to Another on the Division of Work and Responsibility

This study explored the effect of time in a job on the division of work and responsibility between a manager and his boss. It compared two ways of measuring time on a job: job longevity, which is the actual time on the job to date, and job cycle, where the effects of time on the job are believed to be mediated by expectations about how long one will remain on that job. Job cycle, which takes into account expectations, was the best predictor of the way in which tasks and responsibility were divided. Specifically, decision—making, authority and developmental activities varied with the job cycle of the middle manager. The way in which these activities changed was appropriate

to the developmental needs of the middle managers involved. Because middle managers performed their jobs in a manner that was consistent with their expectations about how long they would be on that job, this research suggests that organizations can affect commitment to a particular job by managing expectations about movement from one job to the next.

The results from this study also indicated that rates of movement from one job to the next were generally within the range suggested by previous research; that is, middle managers changed jobs approximately every two to four years. The rate of movement was faster in organizations in which jobs were clearly and narrowly defined than in organizations in which jobs evolved over time. This suggests that organizations can meet middle management development needs by choosing to narrowly define jobs and to move managers quickly or by choosing to adopt a loose structure in which jobs evolve and expand over time.

III. Organizational Signals and the Stay/Leave Decision

J

0

The second study focused on the ways in which organizations can signal (that is, communicate) the opportunity for advancement available to a particular middle manager. Because opportunity for advancement is a key factor in a manager's decision to stay with or leave an organization, this study looked at the effect that different signals had on perceived opportunity within the organization and external to it. Signals varied in their intended effect (positive or negative), in the level of publicity accorded them (public or private), and in whether or not they were relevant to the manager's career goals. Middle managers interpreted signals which were positive, public, and relevant to their goals to mean more internal opportunity; signals of this

type resulted in an increased likelihood of staying with the current organization. The publicity of a signal was important in that it increased the effect of both positive and negative signals. This suggests that an organization can provide public positive signals to desired emplyees or public negative signals to those it does not want to retain and thereby affect the composition of its work force.

Although these signals had the same kinds of effects in all the organizations studied, they had less impact in organizations in which there were clear formal signals about opportunity. In the most extreme case, the Navy, formal systems and signals dominated and informal signals had little effect on the intent to stay or leave. In the Navy, individuals with no advancement opportunity may know that for years before actually leaving; this apparently encourages them to ignore other information such as informal signals. This may subvert attempts to modify or enhance job performance or individual development for these personnel.

IV. Planning, Goal Setting and Incentive Systems

The third study explored issues which revolved around the dissemination of an organization's goals and the incentives which could motivate managers to achieve those goals. Planning, resource allocation, goal setting and reward systems were more loosely linked in practice than in policy within most of these organizations. Specifically, goal setting and resource allocation were widely perceived to occur at different levels in the organization, with resource allocation more frequently reserved to upper levels of management. In organizations where goal setting was most distant from resource allocation, middle managers reported themselves to be more resource constrained than in organizations in which managers reported themselves involved in the resource allocation process. These results suggest that perceptions of constrained

resources may be alleviated by involvement in the resource allocation process.

The incentives and human resource policies of the organization were less salient to middle managers than many aspects of organizational life for which there was no policy and which we refer to as "informal." Middle managers perceived the work in which they were involved and the culture or style of the organization as important factors in motivating them to do their jobs well. The nature of the work itself was important primarily in technologically oriented organizations whereas the culture of the organization was most important in consumer oriented firms. The only formal incentive which was as salient as these informal incentives was salary. This suggests that organizations which have good human resource policies should focus on managing informal aspects of the organization to ensure continued managerial commitment.

IV. Discussion

D

This research explored the relationships between the strategic direction of an organization and its human resource practices. Two constellations of findings emerged from this investigation. The first is that organizations do not adhere to formal policies across the board; rather adherence is simulaneously tight or loose along dimensions that are related to strategic considerations. The second is that managerial satisfaction with work life connects to organizational policy and practice through many different aspects of the internal environment which are systematically related to the business considerations of the organization. Managing these elements appropriately may play a key role in organizational effectiveness, particularly for service organizations. Each of these issues is discussed below.

Adherence to formal policies is not a characteristic of an entire

organizational system, but rather varies across different dimensions or types of policies. Although the implementation of policy within these organizations was more flexible than we had anticipated, this flexibility differed from organization to organization and from policy to policy within an organization. Specific systems were more flexible, and organizational boundaries more permeable when middle managers needed information from outside the organization to adequately perform their jobs. For example, in market driven firms, planning information for middle managers was abundant, middle managers maintained contact with the market and they were likely to initiate product innovation. In firms where technological excellence was key, middle managers received training and education both inside and outside the firm. Hence, this study indicates that permeable boundaries and flexible systems in key areas allow for continued innovation and adaptability of the organization.

Given the strong correlation between satisfaction and performance, it is hardly surprising to find middle managers in successful organizations who are satisfied with work life. What this study tells us is that a great deal of this satisfaction is connected to features of organizational life about which organizational policy says very little, that is, the informal aspects of the organization. In addition, the key informal aspects differed according to the type of organization. Specifically, in consumer oriented firms, the culture or image was important to managers, while in technologically oriented organizations, the nature of the work itself proved essential to motivation. Furthermore, in the service organizations studied, managers widely perceived their organizations as the best at what they did.

V. Future Research

In the successful service organizations we studied, managers believed in

the services they provided and communicated that belief to others.

Therefore, there is evidence of a strong link between managerial commitment and organizational effectiveness. Since the service sector (which contains both military and civilian government organizations) is increasing in importance, exploring this link is clearly a key issue for future research.

VI. Conclusion

The research reported here assessed the match between strategic direction and human resource policies and practices in five successful organizations. Specific investigations of three policies related to retention -- job movement, organizational signals, and incentives -- indicated that the strategic considerations of these organizations were well served by their human resource practices although the configuration of policies and practices differed. The research also indicated that these effective organizations exhibited greater flexibility in interpreting policy and enforcing boundaries in areas in which they needed information to innovate and adapt. Implications for organizations in general, for the Navy, and for future research were also discussed.

References

- "A New Era for Management." Business Week, April 25, 1983.
- Adams, J. Stacy. "The Structure and Dynamics of Behavior in Organizational Boundary Roles." In M. Dunnette (ed.), <u>Handbook of Industrial and Organizational Psychology</u>. Chicago: Rand McNally, 1976.
- Arbeit, Stephen, P. and Sasser, W. Earl. "Selling Jobs in the Service Sector." Business Horizons, June, 1976.
- Atkinson, John W. An Introduction to Motivation. New York: Van Nostrand, 1964.
- Bailyn, Lotte. "Ready, Set and No Place to Go." Wharton Magazine, 1980, 4(2), 58-63.
- Baird, Lloyd, and Kathy Kram. "Career Dynamics: Managing the Superior/Subordinate Relationship." Organizational Dynamics, 1983, 11 (4), 46-64.
- Bellardo, Trudi, and Thomas J. Waldhart. "Marketing Products and Services in Academic Libraries." <u>Libri International Library Review</u>, 1977.
- Bennis, Warren G., and Herbert A. Shepherd. "A Theory of Group Development." <u>Human Relations</u>, 1965, 9, 415-457.
- Berry, Leonard. "Services Marketing is Different." Business, May-June, 1980.
- Bither, Stewart W. and Peter Wright. "Preferences Between Product Consultants: Choices vs. Preferences." The Journal of Consumer Research, 1977, 4.
- Bowen, Donald D., and Douglas T. Hall. "Career Planning for Employee Development: A Primer for Managers." <u>California Management Review</u>, 1977, 29(2), 23-35.
- Bower, Joseph L. <u>Managing the Resource Allocation Process</u>. Homewood, IL: Irwin, 1970.
- Brett, Jeanne M., and James D. Werbel. <u>The Effect of Job Transfer on Employees and Their Families</u>. Washington, DC: Employee Relocation Council, 1980.
- Briscoe, Dennis R. "Organizational Design: Dealing with the Human Constraint." <u>California Management Review</u>, 1980, 23(1), 71-80.
- Buchanan, Bruce II. "Building Organizational Commitment: The Socialization of Managers in Work Organizations." <u>Administrative Science Quarterly</u>, 1974, 19, 533-546.

- Byham, William C., "Applying a Systems Approach to Personnel Activities."

 <u>Training and Development Journal</u>. December 1981, 60-65; January 1982, 70-75; February 1982, 86-90.
- Carmichael, Lorne. "Firm-Specific Human Capital and Promotion Ladder." <u>Bell</u> <u>Journal of Economics</u>, 1983, <u>14</u>, 251-258.
- Carroll, Vincent P., Hau L. Lee, and Ambar G. Rao. "Salesforce Productivity -- An Empirical Approach." Working Paper, Wharton Applied Research Center, Philadelphia, PA, April 1984.
- Chandler, Alfred D., Jr. Strategy and Structure: Chapters in the History of the American Industrial Enterprise. Cambridge, MA: MIT Press, 1962.
- Collier, Don. "Strategic Planning Systems Design and Operation." <u>Journal of Business Strategy</u>, 1980 1(2), 76-77.
- Cook, Frederic W. "Long Term Incentives for Management: An Overview." Compensation Review, 1980, 12(2), 15-25.
- Cottle, Thomas J. <u>Perceiving Time: A Psychological Investigation with Menand Women</u>. New York: Wiley, 1976.
- Deal, Terrence E. and Allan A. Kennedy. <u>Corporate Cultures</u>. Reading, MA: Addison-Wesley 1981.
- Digman, Lester A. "How Well-Managed Organizations Develop Their Executives."

 <u>Organizational Dynamics</u>, 1978, 7(2), 63-79.
- Donahue, Mary Ann. Honeywell ADB: A Mangement Matrix for Integrated

 Strategic and Human Resource Management Planning. Paper presented at the Annual Meeting of the Academy of Management, August 1983.
- Donnelly, James, H., Jr. "Intangibility and Marketing Strategy for Retail Bank Services." <u>Journal of Retail Banking</u>, 1980.
- Donnelly, James H. Jr. "Marketing Notes and Communications." <u>Journal of Marketing</u>, 1976, <u>40</u>.
- Drazin, Robert. Professional Orientation and Innovation Preference: A

 Comparison of Two Models. Unpublished Doctoral Dissertation, University
 of Pennsylvania, Philadelphia, PA, 1982.
- Duncan, Robert, and Andrew Weiss. "Organizational Learning: Implica-tions for Organizational Design." In B.M. Staw (ed.), Research in Organizational Design. Greenwich, CT: JAI Press, 1979.
- Emery, Fred W., and Trist, Eric L. "The Causal Texture of Organizational Evironment." <u>Human Relations</u>, 1965, <u>18</u>, 21-31.
- Fazel, M. "Taking the Mystery Out of Career Development." <u>Personnel</u>, March-April 1978, 46-53.

- Fine, Sidney A., and Wretha W. Wiley. An Introduction to Functional Job Analysis. Washington, DC: W.E. Upjohn Institute, 1971.
- Fisher, Cynthia, "The Transmission of Positive and Negative Feedback to Subordinates: A Laboratory Investigation." <u>Journal of Applied Psychology</u>, 1979, 64, 533-540.
- Fitzroy, Felix R. and Dennis C. Mueller. "Contract and the Economics of Organization." International Institute of Management Discussion Paper 77-25, Wissenschaftszentrum Berlin, June 1977.
- Frank, Robert H. "Choosing the Right Size Pond." Working Paper, Center for Study of American Political Economy, Cornell University, 1983.
- Fombrun, Charles J., and Noel M. Tichy. <u>Strategic Planning and HRM: At Rainbow's End</u>. Unpublished Manuscript, 1981.
- Gabarro, John. "Socialization at the Top--How CEOs and Subordinates Evolve Interpersonal Contacts." Organizational Dynamics, 1979, 7 (3), 3-23.
- Galbraith, Jay R. Organization Design. Reading, MA: Addison-Wesley, 1977.
- Galbraith, Jay R., and Daniel A. Nathanson. <u>Strategy Implementation: The Role of Structure and Process</u>. St. Paul, MN: West, 1978.
- Gergen, Kenneth J. The Psychology of Behavior Exchange. Reading, MA: Addision-Wesley, 1969.
- Gettys, C.F., C.W. Kelley, and C.R. Peterson, "The Best Guess Hypothesis in Multistage Inference." <u>Organizational Behavior and Human Performance</u>, 1973, <u>10</u>, 364-373.
- Goodstadt, Barry E., and Ambar G. Rao. "Microanalytic Recruiter Productivity Models and Techniques for Management Applications." <u>Proceedings for the Joint Service Workshop on Recruiter Productivity</u>, 1983, 64-74.
- Gordon, George G. "Corporate Culture and Incentive Compensation." <u>Best's</u>
 <u>Review</u>, December 1982.
- Gorden, Raymond L. <u>Interviewing: Strategy, Techniques, and Tactics</u>.

 Homewood, IL: Dorsey Press, 1969.
- Greene, Robert J. "Incentive Compensation for Staff Managers." Compensation Review, 1978, 10(1), 20-24.
- Groves, Theodore and Martin Loeb. "Incentives in a Divisionalized Firm."

 <u>Management Science</u>, 1979, <u>25</u>(3), 221-230.
- Hackman, J. Richard, and Charles G. Morris. "Group Tasks, Group Interaction Process, and Group Performance Effectiveness: A Review and Proposed Integration." In L. Berkowitz (ed.), Advances in Experimental Social Psychology (Vol. 8). New York: Academic Press, 1975, 45-99.

- Hall, Douglas T. Careers in Organizations. Goodyear Publications, 1976.
- Haynes, Karen S. "Professional-Nonprofessional Dimensions of Self-Expression in a Professional Organization." <u>Human Relations</u>, 1977, <u>11</u>, 991-1003.
- Hersey, Paul, and Kenneth H. Blanchard. <u>Management of Organizational</u>
 <u>Behavior</u>. 3rd Edition. Engelwood Cliffs, NJ: Presntice-Hall, 1979.
- Hinde, Robert A. <u>Towards Understanding Relationships</u>. London: Academic Press, 1979.
- Hirschey, Mark, and James L. Pappas. "Regulatory and Life Cycle Influences on Managerial Incentives." Southern Economic Journal, 1981, 48(2), 327-334.
- Hogarth, R. and S. Makridakis. "Forecasting and Planning: An Evaluation." <u>Management Science</u>, 1981, 27, 115-138.
- Hrebiniak, Larry, and Willim F. Joyce. <u>Implementing Strategy</u>. New York: MacMillan, 1984.
- Hull, C. Hadlai, and Norman H. Nie. SPSS Update 7-9. New York: McGraw-Hill, 1981.
- Hyman, Susan D. <u>Temporal Influences on Superior-Subordinate Relation-ships:</u>
 <u>A Test of Alternative Models of Job Tenure</u>. Unpublished Doctoral
 Dissertation, University of Pennsylvania, Philadelphia, PA, 1982.
- Ilgen, Daniel R., Cynthia D. Fisher and M.Susan Taylor. "Consequences of Individual Feedback on Behavior in Organizations." <u>Journal of Applied Psychology</u>, 1979, 64, 349-371.
- Ilgen, Daniel R., and Jack M. Feldman. "Performance Appraisal: A Process Focus." In L.L. Cummings and B.M. Staw (eds.), Research in Organizational Behavior, Vol. 5, 1983, 141-197.
- Imundo, Louis V. Jr. "Problems Associated with Management Mobility." Personnel Journal, 1974, 53, 910-914.
- Jaques, Elliott. The Form of Time. New York: Crane Russak, 1982.
- Kahneman, S. and A. Tversky. "On the Psychology of Prediction." <u>Psychological</u> <u>Review</u>, <u>80</u>:237-51.
- Kane, Jeffrey S., and Edward E. Lawler III. "Performance Appraisal Effectiveness: Its Assessment and Determinants." In L.L. Cummings and B.M. Staw (eds.), <u>Research in Organizational Behavior</u>, Vol. 1, 1979, 425-478.
- Katz, Ralph. "Managing Careers: The Influence of Job and Group Longevities." In R. Katz (ed.), <u>Career Issues in Human Resource Management</u>. Englewood Cliffs, NJ: Prentice-Hall, 1982b, 154-181.

- Katz, Ralph. "Time and Work: Toward an Integrative Perspective." In B.M. Staw and L.L. Cummings (eds.), <u>Research in Organizational Behavior</u> (Vol. 2). Greenwich, CT: JAI Press, 1980, 81-127.
- Katz, Ralph. "Job Longevity as a Situational Factor in Job Satisfaction." Administrative Science Quarterly, 1978a, 23, 204-223.
- Katz, Ralph. "The Influence of Job Longevity on Employee Reactions to Task Characteristics." <u>Human Relations</u>, 1978b, 31, 703-725.
- Katz, Ralph, and Michael L. Tushman. "A Longitudinal Study of the Effects of Boundary Spanning Supervision on Turnover and Promotion in Research and Development." Academy of Management Journal, 1983, 26 437-456.
- Kelley, Harold H. Personal Relationships. Hillsdale, NJ: Erlbaum, 1979.
- Kimberly, John R., Robert H. Miles, and Associates. The Organizational Life Cycle: Issues in the Creation. Transformation. and Decline of Organizations. San Francisco: Jossey-Bass, 1980.
- Kimberly, John R., and Robert E. Quinn (eds.). <u>Managing Organizational</u>
 <u>Transitions</u>. Homewood, IL: Dow Jones-Irwin, 1984.
- Koolhaas, Jan. Organization Dissonance and Change. New York: Wiley, 1982.
- Kotler, Philip. <u>Marketing Management: Analysis. Planning. and Control</u>. 5th edition. Englewood Cliffs, NJ: Prentice-Hall, 1984.
- Ketter, John P. Organization Dynamics: Diagnosis and Intervention. Reading, MA: Addison-Wesley, 1978.
- Kunreuther, Howard, R. Ginsberg, L. Miller, P. Sagi, P. Slovic, B. Borkan, and N. Katz. <u>Disaster Insurance Protection: Public Policy Decisions</u>. New York, John Wiley, 1978.
- Kunruether, Howard and J. Lathrop, "Siting Hazardous Facilities: The Case of LNG Terminals," Risk Analysis, 1(1981), pp. 289-302.
- Kunruether, Howard, J. Linnerooth and J. Vaupel, "A Decision Process Perspective on Risk and Policy Analysis," <u>Management Science</u>, Vol. 30, No. 4, April, 1984, pp. 475-485.
- Kunreuther, Howard and Mark Pauly. "Market Equilibrium with Private Knowledge: An Insurance Example." Working Paper 82-08-01, Dept. of Decision Sciences, The Wharton School, Philadelphia, PA.
- Kydd, Christine T. The Effect of Organizational Signals on the Individual Leave/Stay Decision. Unpublished Doctoral Dissertation, University of Pennsylvania, Philadelphia, PA, 1984.
- Lawler, Edward E. III. <u>Pay and Organization Development</u>. Reading, MA: Addison-Wesley, 1981.

- Lawrence, Paul R., and Jay W. Lorsch. "Differentiation and Integration in Complex Organizations." Administrative Science Quarterly, 1967, 12, 1-47.
- Levinger, George. "A Social Exchange View on the Dissolution of Pair Relationships." In R.L. Burgess and T.L. Huston (eds.), Social Exchange in Developing Relationships. New York: Academic Press, 1979.
- Lippman, Steven A. and John J. McCall. "The Economics of Job Search: A Survey." Economic Inquiry, 1976, 14 155-189.
- Lippman, Steven A. and John J. McCall (eds.). Studies in the Economics of Search. New York: North Holland, 1979.
- Loewenstein, G. "Aspiration, Expectations and Effort." Doctoral Dissertation, Department of Economics, Yale University, 1984.
- Lorange, Peter. Corporate Planning: An Executive Viewpoint. Englewood Cliffs: Prentice-Hall, 1980.
- Lorange, Peter, and Declan Murphy. "The Human Resource Dimension in the Strategic Planning Process: Systems Designs Considerations." In Fombrun, C.J., Tichy, N.M. and Devanna, M.A. (eds.), <u>Strategic Human Resource Management</u>, Reading, MA: Addison-Wesley, 1984.
- Lowin, Aaron, and James R. Craig. "The Influence of Performance on Managerial Style: An Experimental Object-Lesson in the Ambiguity of Correlational Data." Organizational Behavior and Human Performance, 1968, 3, 440-458.
- Macklin, Thomas. "Remodeling HRD." <u>Training and Development Journal</u>, June 1982, 45-52.
- Maehr, Martin L., and Douglas A. Kleiber. "The Graying of the Achievement Motivation." American Psychologist, 1981, 36, 787-793.
- Marshall, Judi, and Cary L. Cooper. "The Mobile Manager and His Wife."

 <u>Management Decision</u>, 1976, <u>14</u>, 179-225.

u

- McCaskey, Michael B. "A Contingency Approach to Planning: Planning with Goals and Planning without Goals." <u>Academy of Management Journal</u>, 1974, 17, 281-291.
- McGinnis, Michael A., and M. Robert Ackelsberg. "Effective Innovation Management: Missing Link in Strategic Planning?" The Journal of Business Strategy, 1983, 4(1), 59-66.
- McGrath, Joseph E., and Nancy L. Rotchford. "Time and Behavior in Organizations." In L.L. Cummings an B.M. Staw (eds.), Research in Organizational Behavior (Vol. 5). Greenwich, CT: JAI Press, 1983, 57-101.

- Patchen, Martin. <u>Participation</u>, <u>Achievement</u>, <u>and Involvement on the Job</u>. Engelwood Cliffs, NJ: Presntice-Hall, 1970.
- Pelz, Donald, and Frank M. Andrews. <u>Scientists in Organizations</u>. New York: Wiley, 1966.
- Pencavel, J.H. An Analysis of the Ouit Rate in American Manufacturing Industry. Princeton, NJ: Princeton University Press, 1970.
- Pessemier, Edgar A., P. Burger, R. Reach and D. Tigert. "Using Laboratory Brand Preference Scales to Predict Consumer Brand Purchases," <u>Management Science</u>, 1971, <u>17</u>.
- Peters, Thomas J., and Robert H. Waterman. <u>In Search of Excellence</u>. New York: Harper and Row, 1982.
- Pfeffer, Jeffrey. "Organizational Demography." In L.L. Cummings and B.M. Staw (eds.), Research in Organizational Behavior (Vol. 5). Greenwich, CT: JAI Press, 1983, 299-357.
- Porter, Lyman W. and Richard M. Steers. "Organizational, Work and Personal Factors in Employee Turnover and Absenteeism." <u>Psychological Bulletin</u>, 1973, 80, 151-176.
- Porter, Michael E. <u>Competitive Strategy: Techniques for Analyzing Industries</u>
 <u>and Companies</u>. New York: Free Press, 1980.
- Quinn, Robert E., and Kim Cameron. "Organizational Life Cycles and Shifting Critieria of Effectiveness: Some Preliminary Evidence." <u>Management Science</u>, 1983, 29, 33-51.
- Rappaport, Alfred. "Executive Incentives vs. Corporate Growth." <u>Harvard</u>
 <u>Business Review</u>, July/August 1978, <u>56</u>(4), 81-88.
- Ross, Stephen A. "Some Notes on Financial Incentive Signalling Models, Activity Choice and Risk Preferences." <u>Journal of Finance</u>, 1978, 33(3), 777-794.
- Rothschild, M. "Searching for the Lowest Price When the Distribution of Prices is Unknown." <u>Journal of Political Economy</u>, 1974, <u>82</u>, 689-712.
- Salop, S.C. "Wage Differentials in a Dynamic Theory of the Firm." <u>Journal of Economic Theory</u>, 1973 6, 321-344.
- Salter, Malcolm S. "Tailor Incentive Compensation to Strategy." <u>Harvard</u>
 <u>Business Review</u>, March/April 1973, 84-102.
- Sayles, Leonard R., and George Strauss. Managing Human Resources. Englewood Cliffs, NJ: Prentice-Hall, 1981.
- Schein, Edgar H. <u>Career Dynamics: Matching Individual and Organiza-tional</u>
 <u>Needs</u>. Reading, MA: Addison-Wesley, 1978.

- Mihal, William L. Patricia A. Sorce, Thomas E. Comte. "A Process Model of Individual Career Decision Making." <u>Academy of Management Review</u>, 1984, 9, 95-103.
- Miles, Robert H. Macro Organizational Behavior. Santa Monica, CA: Goodyear, 1980.
- Miller, Ernest C. "Top- and Middle-Management Compensation Part 2: Incentive Bonus and Merit Increase Plans." Compensation Review.
- Miller, Paul. "The Rewards of Executive Incentives." Management Today, May 1982, 29-30.
- Mintzberg, Henry. The Structuring of Organizations. Englewood Cliffs, NJ: Prentice-Hall, 1979.
- Mitchell, Michael D. "The Transition Meeting: A Technique When Changing Managers." <u>Harvard Business Review</u>, 1976, <u>54</u>(3), 13-16.
- Miyazaki, Hajime. "The Rat Race and Internal Labor Markets." <u>Bell Journal of Economics</u>, 1977, <u>8</u>.
- Mobley, William H. "Intermediate Linkages in the Relationship Between Job Satisfaction and Employee Turnover." <u>Journal of Applied Psychology</u>, 1977, 62, 237-240.
- Mobley, W.H., R.W. Griffeth, H.H. Hand, and B.M. Meglino. "Review and Conceptual Analysis of the Employee Turnover Process." <u>Psychological Bulletin</u>, 1979a, <u>86</u>, 493-522.
- Mortensen, Dale. "Specific Capital and Labor Turnover." <u>Bell Journal of Economics</u>, 1978, 9, 572-586.
- Myers, M.S. Every Employee a Manager. New York: McGraw-Hill, 1970.
- Nie, Norman H., C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent. <u>Statistical Package for the Social Sciences</u>. 2nd edition. New York: McGraw-Hill, 1975.
- Noar, Jacob. "Managerial Incentives for Long-Range Planning." Atlanta Economic Review, July/August 1978, 19-22.
- Nunnally, J. C. <u>Psychometric Theory</u>. 2nd edition. New York: McGraw-Hill, 1978.
- Parsons, Donald O. "Specific Human Capital: An Application to Quit Rates and Layoff Rates." <u>Journal of Political Economy</u>, 1972, 80 1120-1143.
- Pascale, Richard Tanner, and Anthony G. Athos. <u>The Art of Japanese</u>

 <u>Management: Applications for American Executives</u>. New York: Simon and Schuster, 1981.

- Schneider, Benjamin, and David E. Bowen. "Employee and Customer Perceptions of Service in Banks: Replication and Extension." <u>Journal of Applied Psychology</u> (in press).
- Schwartz, Howard and Stanley M. Davis. "Matching Corporate Culture and Business Strategy." <u>Organizational Dynamics</u>, 1981, 9(1), 30-48.
- Shacht, Janice, "Matching of Workers and Jobs: A Microeconomic Analysis of Unemployment and Turnover Among Male Adult Workers," Unpublished Doctoral Dissertation, School of Public and Urban Policy, University of Pennsylvania, 1983.
- Shrauger, J.S. and S.E. Rosenberg. "Self-Esteem and the Effects of Success and Failure Feedback on Performance." <u>Journal of Personality</u>, 1970, <u>38</u>, 404-417.
- Simon, Herbert A. "A Formal Theory of the Employment Relationship." <u>Econometrica</u>, 1951, <u>19</u>, 293-305.
- Slater, Philip E. "Some Social Consequences of Temporary Systems." in W.G. Bennis and P.E. Slater (eds.), <u>The Temporary Society</u>. New York: Harper and Row, 1968.
- Snyder, N.H. and W.F. Glueck. "Can Environmental Volatility Be Measured Objectively?" Sloan Management Review, 1982, 25, 185-193.
- Spector, Paul E. "Organizational Frustration: A Model and Review of the Literature." Personnel Psychology, 1978, 31, 815-829.
- Spence, A. Michael. "Job Market Signaling." Quarterly Journal of Economics, 1973, 87, 355-374.
- Staw, Barry M. "The Consequences of Turnover." <u>Journal of Occupational</u>
 <u>Behavior</u>, 1980, <u>1</u>, 253-273.
- Staw, Barry M. <u>Intrinsic and Extrinsic Motivation</u>. Morristown, NJ: General Learning Press, 1976.
- Steers, Richard M. and Richard T. Mowday. "Employee Turnover and Post-Decision Accommodation Processes." In L.L. Cummings and B.M. Staw (eds.), Research in Organizational Behavior, Vol. 3, 1981, 235-281.
- Stigler, George J. "Information in the Labor Market." <u>Journal of Political</u> <u>Economy</u>, 1962, 70, 94-104.
- Stiglitz, Joseph E., and Andrew Weiss. "Incentive Effects of Terminations: Applications to the Credit and Labor Markets." American Economic Review, 73, 912-927.
- Streval, David. "Dual Choice Dental Plan: Process of Consumer Choice."
 Unpublished Doctoral Dissertation, Wharton School of Business, University of Pennsylvania, 1980.

- Terresberry, Shirley. "The Evolution of Organizational Environments."

 Administrative Science Quarterly, 1968, 13, 590-613.
- Tichy, Noel M. Managing Strategic Change: Technical, Political and Cultural Dynamics. New York: Wiley, 1983.
- Tichy, Noel M., Charles J. Fombrun, and Mary Ann Devanna. "Strategic Human Resource Management." Sloan Management Review, Winter 1982, 47-61.
- Tichy, Noel M., Charles J. Fombrun, and Mary Ann Devanna. "Human Resources Mangement: A Strategic Perspective." <u>Organizational Dynamics</u>, Winter 1981, 51-67.
- "The Recovery Ships Middle Managers." Fortune, February 6, 1984.
- Toffler, Alvin. Future Shock. New York: Bantam Books, 1970.
- Van Maanen, John. "Experiencing Organizations: Notes on the Meaning of Careers and Socialization." In J. Van Maanen (ed.), Organizational Careers: Some New Perspectives. New York: Wiley, 1977, 15-48.
- Van Maanen, John, and Edgar H. Schein. "Toward a Theory of Organizational Socialization." In B.M. Staw (ed.), Research in Organizational Behavior (Vol. 1). Greenwich, CT: JAI Press, 1979, 209-264.
- Viscusi, W. Kip. "Employment Relationships with Joint Employer and Worker Experimentation." Paper No. 82-13, Center for the Study of Business Regulation, Duke University, Durham, NC, June 1982.
- Vroom, Victor H., and Philip W. Yetton. <u>Leadership and Decision Making</u>. Pittsburgh: University of Pittsburgh Press, 1973.
- Walker, James W. Human Resource Planning. New York: McGraw-Hill, 1980.
- Wanous, John P. Organizational Entry: Recruitment, Selection, and Socialization of Newcomers. Reading, MA: Addison-Wesley, 1980.
- Weick, Karl E. <u>The Social Psychology of Organizing</u>. 2nd edition. Reading, MA: Addison-Wesley, 1979.
- Wheelwright, Steven C. "Strategy, Management and Strategic Planning Approaches." <u>Interfaces</u>, 1984 4(1), 19-33.
- Weinberg, Charles, B. "Building a Marketing Plan for the Performing Arts." Bulletin, May, 1977.
- Williamson, O., M.L. Wachter, and J.E. Harris, "Understanding the Employment Relation: The Analysis of Idiosyncratic Exchange," <u>Bell Journal of Economics</u>, Vol. 6, No. 1, Spring, 1975, pp. 250-278.
- Wind, Yoram J. <u>Product Policy: Concepts, Methods and Strategy</u>. Reading, MA: Addison-Wesley, 1982.

DISTRIBUTION LIST

Defense Technical Information Center (12 copies) Attn: DTIC DDA-2 Selection and Preliminary Cataloging Section Cameron Station Alexandria, VA 22314 Library of Congress Science and Technology Division Washington, DC 20540 Office of Naval Research (3 copies) Code 4420E 800 N. Quincy Street Arlington, VA 22217 Naval Research Laboratory (6 copies) Code 2627 Washington, DC 20375 Office of Naval Research Director, Technology Programs Code 200 800 N. Quincy Street Arlington, VA 22217 Deputy Chief of Naval Operations (3 copies) (Manpower, Personnel, and Training) Director, Human Resource Management Plans and Policy Branch (Op-150) Department of the Navy Washington, DC 20350 Naval Material Command Deputy Chief of Naval Material, MAT-03 Crystal Plaza #5 Room 236 Washington, DC 20360 Naval Personnel R&D Center (4 copies) Technical Director Director, Manpower & Personnel Laboratory, Code 06 Director, System Laboratory, Code 07 Director, Future Technology, Code 41 San Diego, CA 92152

Program Manager for Human Performance (Code 44) Naval Medical R&D Command National Naval Medical Center

Bethesda, MD 20084

Naval Postgraduate School Attn: Chairman, Department of Administrative Science Department of Administrative Sciences Monterey, CA 93940

Naval Military Personnel Command HRM Department (NMPC-6) Washington, DC 20350

Headquarters, U.S. Marine Corps Code MPI-20 Washington, DC 20380

Office of Personnel Management Office of Planning and Evaluation Research Management Division 1900 E Street, N.W. Washington, DC 20415

Technical Director Army Research Institute 5001 Eisenhower Avenue Alexandria, VA 22333

Technical Director AFHRL/MO(T) Brooks AFB San Antonio, TX 78235

Dr. Jeanne M. Brett Northwestern University Graduate School of Management 2001 Sheridan Road Evanston, IL 60201

Dr. Richard Daft
Texas A&M University
Department of Management
College Station, TX 77843

Dr. Randy Dunham University of Wisconsin Graduate School of Business Madison, WI 53706

Dr. J. Richard Hackman School of Organization and Management Box 1A, Yale University New Haven, CT 06520 Dr. Frank J. Landy
The Pennsylvania State University
Department of Psychology
417 Bruce V. Moore Building
University Park, PA 16802

1

Dr. William G. Ouchi
University of California,
Los Angeles
Graduate School of Management
Los Angeles, CA 90024

Dr. Robert Rice State University of New York at Buffalo Department of Psychology Buffalo, NY 14226

Dr. Benjamin Schneider Department of Psychology University of Maryland College Park, MD 20742

Dr. Edgar H. Schein Massachusetts Institute of Technology Sloan School of Management Cambridge, MA 02139

Dr. Richard M. Steers Graduate School of Management University of Oregon Eugene, OR 97403

Dr. Anne S. Tsui Duke University The Fuqua School of Business Durham, NC 27706

Dr. Andrew H. Van de Ven University of Minnesota Office of Research Administration 1919 University Avenue St. Paul, MN 55104

Dr. Philip Wexler
University of Rochester
Graduate School of Education &
Human Development
Rochester, NY 14627

Mr. Robert Penn NPRDC (Code 16) Catalina Blvd. San Diego, CA 92152 Mr. James Colvard
Deputy Chief of Naval Material
(Code MAT-03)
Crystal City #3
Washington, DC 20390

Mr. Irv Schiff
Office of the Chief of
Naval Operations
Research, Development and Studies
Branch (Op-115)
Washington, DC 20350

Dr. James Lester ONR, Boston 495 Summer Street Boston, MA 02210

Capt. Dana French
HD Leadership & Command
Effectiveness Branch
(Op-152)
1070 Arlington Annex
Arlington, VA 20370

Mr. Thomas R. Muir Director, Civilian Personnel Policy (Op-14) 1070 Arlington Annex Arlington, VA 20370

Dr. Bert T. King
Group Leader, Organizational
Effectiveness
Department of the Navy
Office of Naval Research
Arlington, VA 22217

Deputy Chief of Naval Operations (Manpower, Personnel, and Training) Head, Research, Development, and Studies Branch (Op-115) 1812 Arlington Annex Washington, DC 20350

Director Civilian Personnel Division (Op-14) Department of the Navy 1803 Arlington Annex Washington, DC 20350 (2 copies)

END

FILMED

2-85

DTIC